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*Published by the*

PEABODY MUSEUM OF NATURAL HISTORY  
YALE UNIVERSITY

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Number 214

28 May 1998

## **A Type Catalog of Fossil Invertebrates (Arthropoda: Trilobita) in the Yale Peabody Museum**

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JUL 08 1998





**A Type Catalog of Fossil Invertebrates  
(Arthropoda: Trilobita)  
in the Yale Peabody Museum**

**Russell D. White and Bruce S. Lieberman**

(Received 31 August 1996)

**Abstract**

Type material for 708 nominal species of trilobites are in the Invertebrate Paleontology Collections of Yale University's Peabody Museum of Natural History. Primary types for 347 nominal species include 288 holotypes, 15 lectotypes, one neotype and 156 syntypes (representing 44 nominal species). Secondary types for 164 nominal species include 679 paratypes and 19 paralectotypes. Tertiary types for 393 nominal species include 1253 hypotypes. Most types are from Idaho, New York, Oklahoma, Pennsylvania, Vermont and Utah and have been described by C.E. Beecher, K.S.W. Campbell, D.M. Delo, B.F. Howell, P.E. Raymond, R.J. Ross, A.B. Shaw, J.L. Wilson and H.B. Whittington.

**Key Words**

Type catalog, Trilobita, Yale Peabody Museum, Idaho, New York, Oklahoma, Pennsylvania, Quebec, Vermont, Utah, C.E. Beecher, K.S.W. Campbell, D.M. Delo, B.F. Howell, P.E. Raymond, R.J. Ross, A.B. Shaw, J.L. Wilson, H.B. Whittington.

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ISBN No. 0-912532-44-0

**Introduction**

This catalog lists all known trilobite types in the Invertebrate Paleontology Collections housed in Yale University's Peabody Museum of Natural History. This is the sixth in a series of type catalogs of fossil invertebrates and is a product of an ongoing computerization project to improve the accessibility of the type collections.

Thirty-seven type specimens are missing and cannot be located. The collections have been thoroughly searched by the curatorial staff in the 1960s and 1990s and it is believed that these specimens are permanently lost. The missing status of each specimen is footnoted after each record, respectively. Any information on the whereabouts of these specimens would be greatly appreciated. Most records refer to only one individual unless otherwise noted.

*Dalmanites purduei* and *Dalmanites retusus* are nomina nuda. Dunbar (1918) used these two manuscript names for his faunal chart but did not describe these taxa until two years later (Dunbar, 1920).

Included in this catalog is a set of replicas described by Jacob Green (1832, 1835). The location of the actual specimens has not been determined. Many are presumed to be missing.

The descriptions listed for the locale of the *Triarthrus eatoni* material described by C.E. Beecher, P.E. Raymond and J.L. Cisne have been enhanced by Cisne (1973) and Fred Collier (pers. comm., 1992). Unfortunately, there is little original documentation with this collection.

**Organization**

Specimens are listed under the originally described binomen; genera and species



within genera are presented alphabetically. Each entry includes the catalog number used by the Division of Invertebrate Paleontology prefixed with the coden YPM and the type status of the original designation, followed by all known references to that name. Any subsequent designations are listed under the original designation and are cross-referenced in the body of the text. Errors and inconsistencies appear in footnotes after the locality description at the end of each species listing.

The type designations used are holotype, syntype, and neotype for name bearers; paratype and allotype for secondary types; and hypotype for all tertiary types. Name bearers and secondary types are defined as used in the *International Code of Zoological Nomenclature* (ICZN, 1985). Tertiary types or hypotypes are treated here as any described, figured or measured specimen used in a publication to augment the knowledge of a previously defined species, or any referred specimen that cannot be placed unequivocally in a known species (e.g., *Acheilus* n. sp.).

Locality descriptions follow each entry or set of entries with identical locality data. The locality information includes the stratigraphy, geography, collector and date. Stratigraphy has been standardized using *Stratigraphic Nomenclature Databases for the United States, its Possessions and Territories* (MacLachlan et al., 1992) and the *Lexicon of Canadian Stratigraphy, Volume VI. Atlantic Region* (Williams et al., 1985). Group, formation and member names are abbreviated with *Grp*, *Fm* and *Mbr* respectively. Geography has been enhanced using various gazetteers, maps and historical documentation in the Peabody Museum. The collecting event includes the name of the collector and the date of collection.

## Catalog of Trilobita

### *Acanthopyge consanquinea* (Clarke)

HYPOTYPE YPM 30552

Whittington, H.B. 1956b. *J. Paleont.* v.30, p.1202, pl.131, f.10-13,20.

Early Devonian, Helderberg Grp, New Scotland Limestone. Indian Ladder, Thatcher State Park, near New Salem, Albany Co., New York, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 30553

Whittington, H.B. 1956b. *J. Paleont.* v.30, p.1202, pl.131, f.14-16.

HYPOTYPE YPM 30554

Whittington, H.B. 1956b. *J. Paleont.* v.30, p.1202, pl.131, f.17.

HYPOTYPE YPM 30555

Whittington, H.B. 1956b. *J. Paleont.* v.30, p.1202, pl.131, f.19.

HYPOTYPE YPM 30556-30570

Whittington, H.B. 1956b. *J. Paleont.* v.30, p.1202.

HYPOTYPE YPM 30572

Whittington, H.B. 1956b. *J. Paleont.* v.30, p.1202, pl.131, f.10,11,13,18,20,23.

Early Devonian, Helderberg Grp, New Scotland Limestone. Indian Ladder, Thatcher State Park, near New Salem, Albany Co., New York, USA. Collector: Beecher, C.E.

***Acernaspis? marklandensis* McLearn**  
See *Phacops (Portlockia) marklandensis* McLearn.

***Acernaspis orestes* (Billings)**  
See *Phacops orestes* Billings.

***Acernaspis (Acernaspis) primaeva* (Clarke)**  
See *Portlockia primaeva* (Clarke).

***Acheilus macrops* Raymond**

HOLOTYPE YPM 4758

Raymond, P.E. 1924a. *Proc. Boston Soc. Nat. Hist.* v.37, n.4, p.423, pl.13, f.11.

Raymond, P.E. 1924b. *Rpt. Vt. St. Geol.* p.167, pl.13, f.11.

= *Theodenisia macrops*. Clark, M.G. and A.B. Shaw. 1968. *J. Paleont.* v.42, n.4, p.1016.



Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

See also *Plethopeltis laevis* Raymond.

***Acheilus n. sp.***

HYPOTYPE YPM 18645

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.468.

Middle Cambrian, Rockledge Cgl. Rockledge float (pebble 7), Rockledge Estate, 4.4 mi N of St. Albans on W side of the St. Albans-Highgate Falls road, St. Albans 7.5 Quad., Franklin Co., Vermont, USA. Collector: Shaw, A.B.

***Acheilus spicatus* Raymond**

HOLOTYPE YPM 4748

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.424, pl.13, f.12.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.168, pl.13, f.12.

=*Distazeris spicata*. Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1096.

=*Theodenisia spicatus*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, pl.32, f.32.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Acidaspis trentonensis* Walcott**

HYPOTYPE YPM 245

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.61, pl.6, f.6.

=*Primaspis crosotus* (Locke). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.21.<sup>†</sup>

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

<sup>†</sup>Incorrectly cited as [YPM] 243.

***Acidaspis tuberculata* Conrad**

See *Acidaspis tuberculatus* Conrad.

***Acidaspis tuberculatus* Conrad**

HYPOTYPE YPM 6614

Beecher, C.E. 1893a. Am. J. Sci. ser.3, v.46, p.144, pl.2, f.5-7.

=*Acidaspis tuberculata*. Beecher, C.E. 1895a. Am. Geol. v.16, p.172, pl.9, f.1,2.

=*Acidaspis tuberculata*. Stormer, Leif. 1942. Norsk Geol. Tidsskr. n.21, p.92, pl.1, f.39.

=*Acidaspis tuberculata*. Whittington, H.B. 1956a. J. Paleont. v.30, v.30, p.104, ff.1, pl.24, f.1-5.

Early Devonian, Helderberg Grp, New Scotland Limestone. Indian Ladder, Thatcher State Park, near New Salem, Albany Co., New York, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 30541, 30542

Beecher, C.E. 1893a. Am. J. Sci. ser.3, v.46, p.144.

=undet. Phacopidae. Whittington, H.B. 1956a. J. Paleont. v.30, v.30, p.105.

Early Devonian, Helderberg Grp, New Scotland Limestone. Indian Ladder, Thatcher State Park, near New Salem, Albany Co., New York, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 30543<sup>†</sup>

Beecher, C.E. 1893a. Am. J. Sci. ser.3, v.46, pl.2, f.1.

HYPOTYPE YPM 30544<sup>†</sup>

Beecher, C.E. 1893a. Am. J. Sci. ser.3, v.46, pl.2, f.2.

HYPOTYPE YPM 30545<sup>†</sup>

Beecher, C.E. 1893a. Am. J. Sci. ser.3, v.46, pl.2, f.3.

HYPOTYPE YPM 30546<sup>†</sup>

Beecher, C.E. 1893a. Am. J. Sci. ser.3, v.46, pl.2, f.4.

Early Devonian, Helderberg Grp. Lower Helderberg Grp. Albany Co., New York, USA.

<sup>†</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Acidiphorus spinifer* Raymond**

HOLOTYPE YPM 13028

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.131, pl.8, f.17.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.383, pl.44, f.4,6.

Middle Ordovician, Table Head Grp. Table Point Fm. Division 11 or L, or 11 Zone 3, the *Leperditia* beds, middle Table Head, NE side of Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 1910.

HYPOTYPE YPM 13052A

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.131.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.383.

HYPOTYPE YPM 13052

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.131, pl.8, f.15.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.383, pl.44, f.7,8.

HYPOTYPE YPM 13062A-13062C

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.383.

Middle Ordovician, Table Head Grp. Zone 10 of Logan's section, but may also include Zone 9 and top of 8, mainly lower Table Head, lower Chazy, S from Port au Choix village to lighthouse along gulf north, Point Riche, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 7/31/1910.

***Acmarhachis* sp.**

HYPOTYPE YPM 18647

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.481, pl.57, f.23,24.<sup>†</sup>

Late Cambrian, Rockledge Cgl. Basal sandy limestone below breccia lens, 3.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

<sup>†</sup>Incorrectly cited as "TPM 18647."

***Acrolichas minganensis* (Billings)**

HYPOTYPE YPM 50062

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.125.

Ordovician, Mingan Fm. Twenhofel Zone A5, Bald Island, Mingan Islands, Quebec, Canada. Collector: Twenhofel, W.H.

***Agnostus innocens* Clark**

HYPOTYPE YPM 4710

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.390, pl.12, f.1.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.138, pl.12, f.1.<sup>†</sup>

=*Micragnostus innocens*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.12, pl.1.f.7.

HYPOTYPE YPM 4717

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.390, pl.12, f.5.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.138, pl.12, f.5.<sup>†</sup>

=*Micragnostus innocens*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.12, pl.1, f.1.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

<sup>†</sup>Erroneously reported by Raymond (1924) as Milton Limestone.

***Agnostus insuetus* Raymond**

HOLOTYPE YPM 4731

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.393, pl.12, f.2.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.140, pl.12, f.2.

=*Micragnostus insuetus*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.13, pl.2, f.6.

PARATYPE YPM 4754<sup>†</sup>

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.393, pl.12, f.6.



Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.140, pl.12, f.6.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

†This specimen was lost in 1987 while on loan.

***Agnostus cf. rakuroensis Kobayashi***

HOLOTYPE YPM 14337

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27,  
n.160, p.297, pl.1, f.1.

=*Baltagnostus cf. rakuroensis*. Jell, P.A.  
and N.C. Hughes. 1997. Spec. Pap.  
Palaeont. v.58, n.1, p.57, pl.16, f.1.

Middle Cambrian. Green phyllitic shale with  
ferruginous patches, along road between  
Turkapur and bend of the Talar River, Talar  
Valley, 5 mi from Handawara (Handawor) on road  
to Zachaldor, NW part of Vale of Kashmir,  
Kashmir, India. Collector: de Terra, H., 1932.

***Agnostus sp.***

HOLOTYPE YPM 17087

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240,  
n.9, p.637, pl.1, f.17.

HOLOTYPE YPM 17088

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240,  
n.9, p.637, pl.1, f.16.

Cambrian, Corner-of-the-Beach Fm. W of Corner-  
of-the-Beach, Gaspé, Quebec, Canada.  
Collector: Schuchert, C. and Cloud, P.E.

***Amblycranium cornutum Ross***

HOLOTYPE YPM 18014

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.67, pl.13, f.3-5.

PARATYPE YPM 18015

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.67, pl.13, f.1,2,7.

PARATYPE YPM 18016, 18017

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.67.

PARATYPE YPM 18018

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.67, pl.13, f.8,9.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Amblycranium variabile Ross***

HOLOTYPE YPM 18020

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.64, pl.13, f.14,17,18.

PARATYPE YPM 18019

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.64, pl.13, f.11,15,16.

PARATYPE YPM 18021

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.64, pl.13, f.10.

PARATYPE YPM 18022

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.64, pl.13, f.12,13.

Early Ordovician, Garden City Fm, Zone E. 413 ft  
(313 ft in Ross notebook) above base of Garden  
City, northeast (N45E) along 0.5 mi long  
measured section starting along road at bottom of  
Hillyard's Canyon at a point 0.8 mi N of S end of  
canyon at an elevation of 7200 ft, and ending  
near top of ridge on E side of canyon, Bear River  
Range, and about 12 mi E of Preston, Preston  
Quad., E NE sec23T15SR41E, W NW  
sec24T15SR41E, Franklin Co., Idaho, USA.  
Collector: Ross, R.J., Jr., 1947.

***Amblycranium? populus Ross***

HOLOTYPE YPM 18043

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.67, pl.13, f.20-22.

PARATYPE YPM 18044

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.67, pl.13, f.19.

Early Ordovician, Garden City Fm, Zone E. 413 ft  
(313 ft in Ross notebook) above base of Garden  
City, northeast (N45E) along 0.5 mi long  
measured section starting along road at bottom of



Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Amblycranium?* sp.**

HYPOTYPE YPM 18045

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.16, f.14.

HYPOTYPE YPM 18046

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.16, f.10.

HYPOTYPE YPM 18047

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.16, f.11,15,16.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Ambonolium lioderma* Raymond**

SYNTYPE YPM 4727

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.453, pl.14, f.10.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.192, pl.14, f.10.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.36, pl.23, f.10.<sup>†</sup>

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

SYNTYPE YPM 4750

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.453, pl.14, f.14.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.192, pl.14, f.14.

=*Phylacterus saylesi* Raymond. Hypotype. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.55, pl.43, f.2.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

<sup>†</sup>Cited as the holotype, but a holotype was not designated in the original description.

***Amechilus palaora* Ross**

HOLOTYPE YPM 18182

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.112, pl.28, f.15.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Amphilichas arenaceus* Twenhofel**

HOLOTYPE YPM 25649

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.327.

Early Silurian, Llandoverly, Gun River Fm. Brooks on W side of Cape Sand Top, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 8/13/1919.

***Amphilichas borealis* Twenhofel**

HOLOTYPE YPM 10398

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.328, pl.57, f.7,8.

Late Ordovician, English Head Fm. English Head, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Amphion canadensis* Billings**

HYPOTYPE YPM 7399

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.363, pl.14, f.10,11.

=*Pliomerops canadensis*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.238, pl.36, f.10,11.

Middle Ordovician, Chazy Grp. Sloop Bay,  
Valcour Island, Clinton Co., New York, USA.  
Collector: Raymond, P.E.

HYPOTYPE YPM 50064<sup>†</sup> ††

Raymond, P.E. 1905a. Ann. Carnegie Mus.  
v.3, n.2, p.363, pl.14, f.13.

=*Plimerops canadensis*. Raymond, P.E.  
1910b. Rpt. Vt. St. Geol. p.238, pl.36, f.13.

†A thorough search by the curatorial staff in the  
1960s and 1990s could not locate this specimen.  
It is believed to be permanently lost.

††The precise locality of this specimen is  
unknown. Localities given for this species on  
p.365 list "Valcour, Valcour Island, Chazy and  
Coopersville, New York; Isle La Motte, Vermont;  
Montreal and Mingan Islands, Canada."

### ***Ampyx niagarensis* Van Ingen**

HYPOTYPE YPM 26115

Thomas, N.L. 1929a. Bull. Denison Univ.  
Sci. Lab. v.24, p.1, pl.1, f.1.

Early Silurian, Wenlock, St. Clair Fm. Hills between  
Penters Bluff [Izzard Co.] and St. Clair Spring  
[Independence Co.], N of Batesville, Independence  
Co., Arkansas, USA. Collector: Thomas, N.L.

### ***Ampyxoides semicostatus* (Billings)**

HYPOTYPE YPM 13029

Whittington, H.B. 1965. Bull. Mus. Comp.  
Zool. (Harvard Univ.) v.132, n.4, p.319.

Middle Ordovician, Table Head Grp. Middle Table  
Head, Normanskill, about 1 mi NW of Dominion  
Iron and Steel Co., W shore of West Bay, Port au  
Port, western Newfoundland, Canada. Collector:  
Schuchert, C., Dunbar, C.O. and Edwards, W.S.,  
7/16/1918.

### ***Anasobella asper* Campbell**

PARATYPE YPM 24880

Campbell, K.S.W. 1967. Bull. Okla. Geol.  
Surv. n.115, p.32.

Late Silurian, Ludlow, Hunton Grp. Henryhouse  
Limestone. Barren slope 100 ft NE of B4157,  
Cedar Bluff sec., Arbuckle Mountains, NW corner  
NE1/4sec09,T02N,R06E, Pontotoc Co.,  
Oklahoma, USA. Collector: Reeds, C.A., 1905.

### ***Anisopyge mckeei* Cisne**

PARATYPE YPM 15968

Cisne, J.L. 1971. J. Paleont. v.45, n.3, p.529.

PARATYPE YPM 26555

Cisne, J.L. 1971. J. Paleont. v.45, n.3,  
p.529, pl.68, f.12.

PARATYPE YPM 26556

Cisne, J.L. 1971. J. Paleont. v.45, n.3,  
p.529, pl.68, f.16.

PARATYPE YPM 26557

Cisne, J.L. 1971. J. Paleont. v.45, n.3,  
p.529, pl.68, f.3,8,9.

Early Permian, Kaibab Limestone. Bottomless  
Pits and vicinity, facies 3 of the member, T 21 N,  
R 8 E, 16 mi E of Flagstaff, Coconino Co.,  
Arizona, USA. Collector: Dunbar, C.O. and  
Morris, P.A.

### ***Anisopyge* aff. *A. mckeei***

HYPOTYPE YPM 26553

Cisne, J.L. 1971. J. Paleont. v.45, n.3,  
p.529, pl.68, f.22,23.

Permian, Gym Limestone. Probably lower upper  
Gym, 2 mi E of b.m. 4984, 2 mi NE of summit of  
Rancheria Mountain, Hueco Mountains, west  
Texas, Hudspeth Co., Texas, USA. Collector:  
King, R.E.

### ***Annamitella?* sp.**

HYPOTYPE YPM 50112

McKerrow, W.S. and R.M. Cocks. 1977.  
Can. J. Earth Sci. v.14, p.494.<sup>†</sup>

Middle Ordovician, Davidsville Grp. 2 km W of  
Little Harbor, N shore of Gander Lake, New-  
foundland, USA. Collector: Jenness, S.E.

<sup>†</sup>Cited as YPM 12345 on p.494.

### ***Anomocare?* *rex* Howell**

HYPOTYPE YPM 13439

Howell, B.F. 1937. Bull. Geol. Soc. Am.  
v.48, n.8, p.1194.

Middle Cambrian, St. Albans Slate. 1 mi SE of  
Swanton Junction, Franklin Co., Vermont, USA.  
Collector: Schuchert, C.



***Anomocare vermontense* Howell**

PARATYPE YPM 13426

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1193.

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Anomocarella memor* (Reed)**

HYPOTYPE YPM 14328

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.9.

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.21, f.6.

HYPOTYPE YPM 14332

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.12(left).

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.21, f.5.

HYPOTYPE YPM 14334

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.11(left).

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.19, f.7.

HYPOTYPE YPM 14336

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.13(top).

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.19, f.9.

HYPOTYPE YPM 32865

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.10.

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.21, f.2.

HYPOTYPE YPM 32866

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.12(right).

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.21, f.5.

HYPOTYPE YPM 32867

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.11(right).

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.19, f.8.

HYPOTYPE YPM 32868

Kobayashi, Teiichi. 1934. Am. J. Sci. v.27, n.160, p.301, pl.1, f.13(below).

=*Hundwarella memor*. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.19, f.8, pl.21, f.1.

Middle Cambrian. Green phyllitic shale with ferruginous patches, along road between Turkapur and bend of the Talar River, Talar Valley, 5 mi from Handawara (Handawor) on road to Zachaldor, NW part of Vale of Kashmir, Kashmir, India. Collector: de Terra, H., 1932.

***Antagmus schucherti* Raymond**

HOLOTYPE YPM 14799A

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1107, pl.4, f.12.

=*Hysteropleura schucherti*. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.290.

PARATYPE YPM 14799B

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1107, pl.4, f.11.

=*Hysteropleura schucherti*. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.290.

PARATYPE YPM 14799C

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1107, pl.4, f.10.

=*Hysteropleura schucherti*. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.290.

PARATYPE YPM 14799D



Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1107, pl.4, f.13.

=*Hysteropleura schucherti*. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.290.

Late Cambrian, Sweetsburg Fm, Hungerford Slate Mbr. 1 mi S of Parker Cobble, 1 mi W of Georgia Center, Franklin Co., Vermont, USA. Collector: Schuchert, C.

### ***Apatokephaloides clivosus* Raymond**

HOLOTYPE YPM 4711

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.425, pl.13, f.13.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.169, pl.13, f.13.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.41, pl.29, f.1.

PARATYPE YPM 4725

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.425, pl.13, f.17.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.169,170, pl.13, f.17.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

See also *Hungaia minuta* Raymond.

### ***Apatokephaloides inflatus* Raymond**

HOLOTYPE YPM 4741

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.426.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.170.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

### ***Apatokephalus?* sp. Ross**

HYPOTYPE YPM 18767

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.636, pl.62, f.8,12.

Early Ordovician, Garden City Fm. 480 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River

Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

### ***Apedopyanus parkeri* Raymond**

HOLOTYPE YPM 14800

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1123, pl.4, f.18.<sup>†</sup>

=*Hysteropleura schucherti* (Raymond). Hypotype. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.291.

Late Cambrian, Sweetsburg Fm, Hungerford Slate Mbr. 1 mi S of Parker Cobble, 1 mi W of Georgia Center, basal part of Hungerford, Franklin Co., Vermont, USA. Collector: Schuchert, C.

<sup>†</sup>Not 15038 as published on p.291.

### ***Aposolenopleura dunbari* Raymond**

HOLOTYPE YPM 14711

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1093,1094, pl.1, f.21.

=*Ptychopleurites dunbari*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.33, pl.21, f.8,9.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

### ***Arapahoia raymondi* Lochman**

HOLOTYPE YPM 15863<sup>†</sup>

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466, pl.57, f.17,21.

PARATYPE YPM 15864<sup>†</sup>

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466, pl.57, f.23.

PARATYPE YPM 15865<sup>†</sup>,15866<sup>†</sup>

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466.

PARATYPE YPM 15867<sup>†</sup>

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466, pl.57, f.24.

PARATYPE YPM 15868<sup>†</sup>

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466,57, f.25.

PARATYPE YPM 15869<sup>†</sup>

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466, pl.57, f.18.

Late Cambrian, Petit Jardin Fm, Big Cove Mbr. Near Little Green Garden, Cape St. George, Newfoundland, Canada. Collector: Dunbar, C.O., 1920.

<sup>†</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate these specimens. They are believed to be permanently lost.

### ***Arctinurus clarensis* Thomas**

SYNTYPE YPM 26131

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.17, pl.1, f.17.

SYNTYPE YPM 26132

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.17, pl.1, f.18.

SYNTYPE YPM 26133

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.17, pl.1, f.19.

SYNTYPE YPM 26134

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.17, pl.1, f.20.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

### ***Arges consanguineus* Clarke**

See *Phaethonides* sp.

### ***Arionellus tripunctatus* Whitfield**

SYNTYPE YPM 3126

Whitfield, R.P. 1876. U.S. War Dept. p.141, pl.1, f.3-5.

Whitfield, R.P. 1899. Ann. N.Y. Acad. Sci. v.12, n.8, p.141.<sup>†</sup>

=*Crepicephalus tripunctatus*. Lectotype. Walcott, C.D. 1916. Smith. Misc. Coll. v.64, n.3, p.215, pl.33, f.1,1A.<sup>††</sup>

=*Tricrepicephalus tripunctatus*. Lectotype. Shimer, H.W. and R.R. Shrock. 1944. John Wiley and Sons: New York p.635, pl.262, f.11.

SYNTYPE YPM 26907

Whitfield, R.P. 1876. U.S. War Dept. p.141, pl.1, f.5.

Whitfield, R.P. 1899. Ann. N.Y. Acad. Sci. v.12, n.8, p.181.<sup>†</sup>

=*Crepicephalus tripunctatus*. Paralectotype. Walcott, C.D. 1916. Smith. Misc. Coll. v.64, n.3, p.215, pl.33, f.1B.<sup>†††</sup>

SYNTYPE YPM 26908

Whitfield, R.P. 1876. U.S. War Dept. p.141, pl.1, f.4.

Whitfield, R.P. 1899. Ann. N.Y. Acad. Sci. v.12, n.8, p.181.<sup>†</sup>

=*Crepicephalus tripunctatus*. Paralectotype. Walcott, C.D. 1916. Smith. Misc. Coll. v.64, n.3, p.215.<sup>††††</sup>

Late Cambrian, Gallatin Grp, Pilgrim Dol. Limestone "just above Moss Agate Springs," on South Fork of Deep Creek [Smith River], about 20 mi SE of Camp Baker, [and about 9 mi S of White Sulphur Springs], Meagher Co., Montana, USA. Collector: Dana, E.S. and Grinnell, G.B., 8/7/1875.

<sup>†</sup>Whitfield (1899) designated this specimen as the "type"; USNM incorrectly designated as repository.

<sup>††</sup>Designated as the "type."

<sup>†††</sup>Designated as "associated free cheek."

<sup>††††</sup>Designated as "associated free cheek"; assigned USNM 26934 on USNM specimen label.

### ***Armagnostus megalaxis* Howell**

PARATYPE YPM 13413

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1162.

Middle Cambrian, St. Albans Slate. 0.375 mi SE of mouth of Rugg Brook, 3 mi SSE of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

### ***Arthrorhachis longicollis* Raymond**

HOLOTYPE YPM 13054

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.12, pl.1, f.5.

=*Geragnostus longicollis*. Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.301, pl.1, f.1-3.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 1, upper Table Head, Normanskill, from fault blocks near the fault striking N of Bell Burns, S of Table Head, western Newfoundland, Canada. Collector: Schuchert, C., 8/7/1910.

PARATYPE YPM 13051

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.12, pl.1, f.6.

=*Galbagnostus galba* (Billings). Hypotype. Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.305.

Middle Ordovician, Table Head Grp. Division 12 or M, or upper part of 12, or Division 12, Zone 2, upper Table Head, Normanskill, Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 8/6/1910.

### ***Asaphelina* sp.**

HYPOTYPE YPM 18383

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.109, pl.36, f.1-4.

Ordovician, Garden City Fm. 375 ft below top of Garden City, abandoned road cut on W side of US Rt. 89, Twin Bridges Dugway, Logan River Canyon, and about 14 mi NE of Logan, Logan Quad., NW SW sec34T13NR3E, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 7/1946.

### ***Asaphellus? eudocia* (Walcott)**

HYPOTYPE YPM 18172

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.107, pl.27, f.27.

HYPOTYPE YPM 18173

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.107, pl.27, f.19,20.

HYPOTYPE YPM 18174

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.107, pl.27, f.18,21.

HYPOTYPE YPM 18175

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.107, pl.27, f.17,22,23.

Early Ordovician, Garden City Fm. 495 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Asaphellus obtectus* Raymond**

HOLOTYPE YPM 4732

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.428.pl.13, f.14.

=*Bellefontia obtecta*. Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.171, pl.13, f.14.

Early Ordovician, Georgia Slate. Base of formation, 5 mi N of Highgate Center, 0.5 mi S of Canadian border, 0.5 mi W of Rock River, Franklin Co., Vermont, USA. Collector: Schuchert, C., 1922.

### ***Asaphellus? sp. A***

HYPOTYPE YPM 18170

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.107, pl.27, f.13-15.

HYPOTYPE YPM 18171

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.107, pl.27, f.12,16.

Early Ordovician, Garden City Fm, Zone G(2)c. 558 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Asaphellus? sp. B***

HYPOTYPE YPM 18176

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.108, pl.28, f.1,6,7.

HYPOTYPE YPM 18177

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.108, pl.28, f.2.

HYPOTYPE YPM 18178



Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.108, pl.28, f.3,8,10.

Early Ordovician, Garden City Fm, Zone G(2)d. 655 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Asaphiscus inornatus* Raymond**

HOLOTYPE YPM 4743

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.409, pl.12, f.23.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.154, pl.12, f.23.

=*Platydiamesus inornatus*. Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1020.

=*Platydiamesus inornatus*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.38, pl.26, f.1.<sup>†</sup>

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

<sup>†</sup>Incorrectly cited as 4742 on p.38, pl.26, f.1.

***Asaphus caudatus* Brongniart**

HYPOTYPE YPM 26742<sup>†</sup>

Green, Jacob. 1832. A Monograph of the trilobites of North America—with coloured models of the species, p.50.

Middle Devonian, Onondaga Grp, probably Columbus Limestone. Ripley, Brown Co., Ohio, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

***Asaphus? crypturus* Green**

HYPOTYPE YPM 26762<sup>†</sup>

Green, Jacob. 1835. A supplement to the monograph of the trilobites of North America—with coloured models of the species, p.18.

Early Devonian. Moose River, Nova Scotia, Canada.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

***Asaphus laticostatus* Green**

HYPOTYPE YPM 26739<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.45.

Early Devonian, Schoharie Grit. Ulster Co., New York, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

***Asaphus limilurus* Green**

HYPOTYPE YPM 26741<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.48.

Early Silurian, Wenlock, Niagara Grp. Lockport, Niagara Co., New York, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

***Asaphus marginalis* Hall**

HYPOTYPE YPM 7409A

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.339, pl.10, f.17.

=*Basilicus marginalis*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.221, pl.32, f.17.

HYPOTYPE YPM 7409B

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.339, pl.10, f.18.

=*Basilicus marginalis*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.221, pl.32, f.18.

Middle Ordovician, Chazy Grp. Sloop Bay, Valcour Island, Clinton Co., New York, USA. Collector: Raymond, P.E.

HYPOTYPE YPM 50065<sup>†</sup>

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.339, pl.10, f.19.

=*Basilicus marginalis*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.221, pl.32, f.19.

Middle Ordovician. Chazy, Clinton Co., New York, USA.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Asaphus micrurus* Green**

HYPOTYPE YPM 26744†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.56, pl.f.3.

Early Devonian, Helderberg Grp. New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Asaphus myrmecophorus* Green**

HYPOTYPE YPM 26761†

Green, Jacob. 1835. A supplement to the monograph of the trilobites of North America—with coloured models of the species, p.16.

Early Devonian, Helderberg Grp. Genesee Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Asaphus pleuroptyx* Green**

HYPOTYPE YPM 26743†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.55.

Early Devonian, Helderberg Grp. Helderberg Mountains, Albany Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Asaphus selenurus* Eaton**

HYPOTYPE YPM 26740†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.46.

Lower Devonian, Helderberg Grp. Becraft Hills, Hudson, Columbia Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Asaphus tetragonocephalus* Green**

HYPOTYPE YPM 26759†

Green, Jacob. 1835. A supplement to the monograph of the trilobites of North America—with coloured models of the species, p.12.

Probably Newport, New York.

†This is a replica. The location of the actual specimen has not been determined.

***Asaphus wetherilli* Green**

HYPOTYPE YPM 26745†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.57.

Early Silurian, Wenlock, Clinton Grp. Near Rochester, Monroe Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Asteropyge punctata* (Steininger)**

HYPOTYPE YPM 6643

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, tf.11.7,7.1.

Middle Devonian, Eifelian, Calceola beds. Gees, Gerolstein, Eifel District, Germany.

***Balizoma ramskoeldi* Edgecombe**

HOLOTYPE YPM 16270

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963, tf.2.1-6.

PARATYPE YPM 16048

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963, tf.2.7, 2.11, 2.15.

PARATYPE YPM 16050

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963, tf.2.16.

PARATYPE YPM 16268

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963, tf.2.10,2.14,2.18.

HYPOTYPE YPM 16051

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963.

HYPOTYPE YPM 16269

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963, tf.2.17.†

Late Silurian, Ludlow, Brownsport Fm. Near Decaturville, Decatur Co., Tennessee, USA.

HYPOTYPE YPM 29267

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963, tf.2.9,2.13.<sup>†</sup>

HYPOTYPE YPM 29268

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.963, tf.2.8,2.12.<sup>†</sup>

<sup>†</sup>According to Edgecombe (1990), the locality on the specimen label is incorrect. Edgecombe (1990) believes that the lithology and preservation of this specimen is similar to the Brownsport Formation of Tennessee.

***Baltagnostus cf. rakuroensis* (Kobayashi)**  
See *Agnostus cf. rakuroensis* Kobayashi.

***Basidechenella arkonensis* Stumm**

HYPOTYPE YPM 33849

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.96.

Middle Devonian, Hamilton Grp, Ludlowville Fm. Genesee Co., New York, USA.

HYPOTYPE YPM 33860

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.96, tf.27.1,2.

Middle Devonian, Hamilton Grp, Ludlowville Fm, Wanakah Shale Mbr. Trilobite beds, probably Wanakah, Greene Co., New York, USA.

***Basidechenella canaliculata* (Hall)**

HYPOTYPE YPM 33777

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.100, tf.28.7.<sup>†</sup>

Middle Devonian, Hamilton Grp. Cherry Valley, Otsego Co., New York, USA.

<sup>†</sup>Incorrectly cited as YPM 33773 on p.100.

***Basidechenella clara* (Hall)**

HYPOTYPE YPM 33813

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.91.<sup>†</sup>

Middle Devonian. Onondaga Grp, Columbus Limestone. Marion, Marion Co., Ohio, USA.

HYPOTYPE YPM 33821

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.91, tf.23.7.

Middle Devonian, Onondaga Grp, Onondaga Limestone. Leroy, Genesee Co., New York, USA.

<sup>†</sup>Incorrectly cited as YPM 33183 on p.91.

***Basidechenella rowi* (Green)**

HYPOTYPE YPM 26159

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp, Wanakah Shale. On the lake, Hamburg, Erie Co., New York, USA.

HYPOTYPE YPM 32969

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp, Ludlowville Fm, Centerfield Limestone Mbr. RR cut, East Bethany, Genesee Co., New York, USA.

HYPOTYPE YPM 33773

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47, tf.26.6,26.8.<sup>†</sup>

HYPOTYPE YPM 33774, 33775

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp. Eighteen Mile Creek, Erie Co., New York, USA.

HYPOTYPE YPM 33790

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp. On the lake, Hamburg, Erie Co., New York, USA.

HYPOTYPE YPM 33814

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47,95, tf.26.2.

HYPOTYPE YPM 33815

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

HYPOTYPE YPM 33816



Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47,95, tf.26.3,4,9,11.

HYPOTYPE YPM 33817

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp, Ludlowville Fm, Wanakah Shale Mbr. Trilobite beds, Wanakah Cliff Beach, Greene Co., New York, USA.

HYPOTYPE YPM 33848

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp, Ludlowville Fm. East Bethany, Genesee Co., New York, USA.

HYPOTYPE YPM 33861

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp. New York, USA.

HYPOTYPE YPM 33864-33866

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.47.

Middle Devonian, Hamilton Grp, Ludlowville Fm. RR cut, East Bethany, Genesee Co., New York, USA.

†Not *Basidechenella canaliculata* as stated on p.100.

### ***Basidechenella timwhitei* Lieberman**

HOLOTYPE YPM 25594

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.108, tf.32.7.

HYPOTYPE YPM 25595, 26868

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.108.

Early Mississippian, Osagean, Edwardsville Fm. Crawfordsville, Montgomery Co., Indiana, USA. Collector: Braun, F.

### ***Basilicus erastusi* (Raymond)**

See *Illaenus erastusi* Raymond.

### ***Basilicus marginalis* (Hall)**

HYPOTYPE YPM 23293

Raymond, P.E. 1910a. Ann. Carnegie Mus. v.7, n.1, p.62, tf.1, pl.17, f.6.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.220, pl.37, f.6.

Middle Ordovician, Crown Point Limestone. Middle to upper part of formation, Sloop Bay, ledges near water in center of bay shore in dark gray, hard limestone with much pyrite, Shaw (1968) loc. V114, Valcour Island, Lake Champlain, Clinton Co., New York, USA.

See also *Asaphus marginalis* Hall.

### ***Basilicus?* sp.**

HYPOTYPE YPM 18155

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.106, pl.27, f.2,4.

HYPOTYPE YPM 18156

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.106, pl.27, f.3,5.

Early Ordovician, Garden City Fm, Zone G(2)c. 558 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Basilicus (Basiella) whittingtoni* Shaw**

HYPOTYPE YPM 23310

Shaw, F.C. 1968. Mem. New York St. Mus. n.17, p.62, pl.23, f.9.

Middle Ordovician, Chazy Grp. Lake Champlain region, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

### ***Bathurellus abruptus* Billings**

HYPOTYPE YPM 13053

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, pl.3, f.18.

Early Ordovician, St. George Grp. Zone 8 of Logan's section, upper St. George, upper Beekmantown, near NE end of Old Port au Choix Bay, Port au Choix, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 7/29/1910.

### ***Bathurellus? antiquus* Raymond**

HOLOTYPE YPM 14747

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1118, pl.3, f.11.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Bathyurellus permarginatus* Cullison**

HOLOTYPE YPM 17170

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.70, pl.34, f.23.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert nodules, elevation 1020 ft, Rolla quadrangle, E1/2E1/2SW1/4sec03, T37N,R08W, Phelps Co., Missouri, USA. Collector: Polhemus, J.

***Bathyrurus eskimoensis* Twenhofel**

HOLOTYPE YPM 20513

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72, pl.11, f.20.

HYPOTYPE YPM 20514A

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72, pl.11, f.21.

HYPOTYPE YPM 20514B-20514D

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72.

Middle Ordovician, Mingan Fm. Basal 50 to 60 ft of Fm, S side of Eskimo Island, Mingan Islands, Gulf of St. Lawrence, Quebec, Canada. Collector: Twenhofel, W.H.

***Bathyrurus romainensis* Twenhofel**

HOLOTYPE YPM 15290A

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72, pl.10, f.7.

PARATYPE YPM 15290B

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72, pl.10, f.8.

Early Ordovician, Romaine Fm. Large Island, Mingan Islands, Gulf of St. Lawrence, Quebec, Canada. Collector: Twenhofel, W.H.

PARATYPE YPM 26209

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72, pl.11, f.8.<sup>†</sup>

PARATYPE YPM 35701

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72.

Early Ordovician, Romaine Fm. Bay W of Clearwater Point, Mingan Islands region, Gulf of St. Lawrence, Quebec, Canada. Collector: Twenhofel, W.H.

PARATYPE YPM 35703A, 35703B

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.72.

Early Ordovician, Romaine Fm. Large Island, Mingan Islands, Gulf of St. Lawrence, Quebec, Canada. Collector: Twenhofel, W.H.

<sup>†</sup>Cited as cotype on pl.11, f.8.

***Bellacartwrightia jennyae* Lieberman and Kloc**

HYPOTYPE YPM 33763, 74585

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.42, tf.13.5.

Middle Devonian, Givetian, Hamilton Grp., Ludlowville Fm., Centerfield Limestone. Western New York, USA.

***Bellacartwrightia* sp. aff. *jennyae* Lieberman and Kloc**

HYPOTYPE YPM 33789

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.42, tf.13.5.

Middle Devonian, Givetian, Hamilton Grp., Moscow Shale, Windom Shale. Western New York, USA.

***Bellacartwrightia phyllocaudata* Lieberman and Kloc**

HYPOTYPE YPM 35808

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.43, tf.17.5,17.10.

Middle Devonian, Hamilton Grp. Moscow Shale, Frame Shale Mbr. Jaycox Creek [Jaycox Run], 2.5 mi N of Genesee village, Livingston Co., New York, USA. Collector: Kloc, G.

***Bellacartwrightia phyllocaudata*? Lieberman and Kloc**

HYPOTYPE YPM 33859

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.43.

Middle Devonian, Hamilton Grp., Western New York, USA.

***Bellacartwrightia pleione* (Hall)**

HYPOTYPE YPM 33779-33782

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.47.

Middle Devonian, probably Onondaga Limestone. Le Roy, Genesee Co., New York, USA. Collector: Bradley, F.H.

***Bellefontia? acuminiferentis* Ross**

HOLOTYPE YPM 18347

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.99, pl.25, f.8.

PARATYPE YPM 18157

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.99, pl.24, f.8.

PARATYPE YPM 18163

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.99, pl.24, f.15.

PARATYPE YPM 18338

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.99, pl.24, f.17.

PARATYPE YPM 18339

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.99, pl.24, f.16.

PARATYPE YPM 18348

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.99, pl.25, f.6.

PARATYPE YPM 18370

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.99, pl.25, f.7.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear

River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

***Bellefontia chamberlaini* Clark**

HYPOTYPE YPM 18161

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.98, pl.25, f.5.

HYPOTYPE YPM 18165

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.98, pl.25, f.12.

HYPOTYPE YPM 18166

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.98, pl.24, f.3,4.

Early Ordovician, Garden City Fm, Zone B. Float, 98-118 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18229

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.98, pl.24, f.1.

HYPOTYPE YPM 18230

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.98, pl.24, f.7.

HYPOTYPE YPM 18231

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.98, pl.24, f.6.

HYPOTYPE YPM 18232

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.98, pl.24, f.2.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

HYPOTYPE YPM 18311



Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.98, pl.25, f.15.

Early Ordovician, Garden City Fm, Zone B. 85 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

**HYPOTYPE** YPM 18331

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.98, pl.22, f.1,2.

Early Ordovician, Garden City Fm, Zone B. 125 ft above base of Garden City, measured section up N side of Green Canyon starting at top of talus at a point about 4800 ft E of canyon mouth, and about 2 mi E of North Logan, Logan Quad., NW sec19T12NR2E, S sec18T12NR2E, Cache Co., Utah, USA. Collector: Ross, R.J., Jr. 7/1947.

**HYPOTYPE** YPM 18341

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.98, pl.25, f.10.

**HYPOTYPE** YPM 18342

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.98, pl.25, f.14.

**HYPOTYPE** YPM 18371

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.98, pl.25, f.13.

**HYPOTYPE** YPM 18372

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.98, pl.25, f.11.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

**HYPOTYPE** YPM 18373, 18374

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.98, pl.23, f.4.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

***Bellefontia obtecta* Raymond**

See *Asaphellus obtectus* Raymond.

***Bellefontia?* sp.**

**HYPOTYPE** YPM 18322

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.26, f.16.

Early Ordovician, Garden City Fm, Zone A. 32-35 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Bellefontia* sp. or *Xenostegium* sp.**

**HYPOTYPE** YPM 18349

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.101, pl.26, f.1.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

**HYPOTYPE** YPM 18350

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.101, pl.26, f.2.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along

1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

***Berkeia granulosa* Wilson**

HOLOTYPE YPM 18591

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.624, pl.89, f.6.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18530

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.624, pl.89, f.3-5.

Late Cambrian, Gatesburg Fm. Crystalline limestone, Imler Quarry, 12 ft above lowest exposed beds of Ore Hill Mbr, just E of township road to E of Evitt's Mountain, 2.5 mi S of junction of this road with Bedford-Rainsburg road at Egoff, Colerain Quad., Colerain Township, Pennsylvania, USA. Collector: Wilson, J.L.

***Blountia imitator* Raymond**

HOLOTYPE YPM 4722

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.409, pl.12, f.22.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.154, pl.12, f.22.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Blountia (Homodictya) imitatrix* Raymond**

See *Coleopachys strix* Raymond, *Homodictya imitatrix* Raymond and *Kaninia? platys* Raymond.

***Blountia cf. mimula* Walcott**

HYPOTYPE YPM 15847

Lochman, C. 1938. J. Paleont. v.12, n.5, p.470, pl.56, f.25

Late Cambrian, Shallow Bay Fm. Loc. 2 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

HYPOTYPE YPM 15848

Lochman, C. 1938. J. Paleont. v.12, n.5, p.470, pl.56, f.26

HYPOTYPE YPM 15876

Lochman, C. 1938. J. Paleont. v.12, n.5, p.470, pl.56, f.26

HYPOTYPE YPM 30484

Lochman, C. 1938. J. Paleont. v.12, n.5, p.470

Late Cambrian, Shallow Bay Fm. Upper Cambrian blocks in Cow Head, from outer of gulf side of Cow Head Peninsula, Cow Head, western Newfoundland, Canada. Collector: Schuchert, C., Dunbar, C.O. and Edwards, W.S., 7/30/1918.

***Blountia terranovica* Resser**

See *Maryvillia arion* Walcott.

***Blountiella? johnsoni* Troelsen**

HOLOTYPE YPM 26190

Troelsen, J.C. 1947. Am. J. Sci. v.245, n.9, p.538, pl.1, f.4-6.

Late Cambrian, East Arm Fm. SW of entrance to SE arm of Bonne Bay, Newfoundland, Canada. Collector: Johnson, H., 1945.

***Bolbocephalus (Hadrohybus) dunbari* Raymond**

See *Hadrohybus dunbari* Raymond.

***Bolbocephalus jeffersonensis* Cullison**

PARATYPE YPM 17174

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.77.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert, *Jeffersonia* trilobite zone, base of hill on N side of Moreau River and on E side of U.S. Hwy 63; SW1/4SW1/4sec27, T44N,R11W, Cole Co., Missouri, USA. Collector: Cullison, J.S.

***Bolbocephalus saintclairi* Cullison†**

PARATYPE YPM 17415

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.79.††



PARATYPE YPM 17416

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.79.<sup>††</sup>

PARATYPE YPM 17417

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.79.<sup>††</sup>

Early Ordovician, Cotter Fm. Massive, gray, granular dolomite, *Jeffersonia jennii* and *Campbelloceras simplex* zone of lower Cotter, road from MO Hwy 25 down to Crystal City Glass Workers Country Club; SW1/4sec27,T40N R06E, Jefferson Co., Missouri, USA. Collector: Cullison, J.S.

<sup>†</sup>This species was incorrectly spelled as *Bolbocephalus st. clairi* by Cullison (1944).

<sup>††</sup>Not 17190 as published on p.78.

***Brachyaspis alacer* (Billings)**

PARATYPE YPM 25648

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.323

Early Silurian, Llandoverly, Becscie Fm. Reef at base of White Cliff, Cape Eagle, E side of Ellis Bay, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Brachyaspis altilis* Raymond**

HYPOTYPE YPM 25647

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.323.

Late Ordovician, Vaureal Fm. Cape Henry, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Brachyaspis schucherti* Cooper and Kindle**

HOLOTYPE YPM 14797<sup>†</sup>

Cooper, G.A. and C.H. Kindle. 1936. J. Paleont. v.10, n.5, p.363, pl.52, f.27,29,37.

Late Ordovician, Grande Coupe Beds. S of Corner-of-Beach, W of English Church, NW of Perce, Quebec, Canada. Collector: Schuchert, C., 1930.

<sup>†</sup>Specimen is a cast of USNM 91823.

***Brachymetopus* (*Brachymetopus*) *gemmaeus* (Hall and Clarke)**

HYPOTYPE YPM 27820

Cisne, J.L. 1970. J. Paleont. v.44, n.3, p.522.

Devonian. Glacial drift, Warren, Warren Co., Pennsylvania, USA. Collector: Randall, F.A.

***Brongniarta trentonensis* (Simpson)**

HYPOTYPE YPM 7449A

Collie, G.L. 1903. Bull. Geol. Soc. Am. v.14, p.418.pl.59, f.1.

=*Homalonotus* (*Brongniartella*) *trentonensis*. Whitcomb, Lawrence. 1930. Bull. Geol. Soc. Am. v.41, p.345, pl.5, f.7.

HYPOTYPE YPM 7449B

Collie, G.L. 1903. Bull. Geol. Soc. Am. v.14, p.418, pl.59, f.2.

=*Homalonotus* (*Brongniartella*) *trentonensis*. Whitcomb, Lawrence. 1930. Bull. Geol. Soc. Am. v.41, p.345, pl.5, f.6.

Middle Ordovician, Trenton Limestone. Horizon A-8 of Collie, lower part of formation, black shaly limestone, Bellefonte, Centre Co., Pennsylvania, USA. Collector: Collie, G.L., 1902.

***Bronteopsis scotia* Nicholson and Etheridge**

HYPOTYPE YPM 13061

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.69.

=*Bronteopsis* sp. ind. Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.400, pl.55, f.1,4.

Middle Ordovician, Table Head Grp. Upper Table Head, Normanskill, about 1 mi NW of Dominion Iron and Steel Co., W shore of West Bay, Port au Port, western Newfoundland, Canada. Collector: Schuchert, C., Dunbar, C.O. and Edwards, W.S., 7/16/1918.

***Bronteopsis* sp.**

See *Bronteopsis scotia* Nicholson and Etheridge.

***Bumastus clairensis* Thompson**

HOLOTYPE YPM 26120

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.4, pl.1, f.6.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair

Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Bumastus cuniculus vieillensis* Northrop**

HOLOTYPE YPM 13351

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.229, pl.25, f.11.

Early Silurian, Wenlock, La Vieille Fm. Near the top of the limestone, ridge W of Port Daniel RR station, which extends from Clemville N to Barrachois, Quebec, Canada. Collector: Schuchert, C., 8/1923.

***Bumastus erastusi* (Raymond)**

HYPOTYPE YPM 15300

Twenhofel, W.H. 1938. Spec. Pap. Geol. Soc. Am. n.11, p.68.

Middle Ordovician, Mingan Fm. Upper third of Fm, Eskimo Island, Mingan Islands, Gulf of St. Lawrence, Quebec, Canada. Collector: Twenhofel, W.H.

See also *Iliaenus erastusi* Raymond.

***Bumastus globosus* (Billings)**

See *Iliaenus globosus* Billings.

***Bumastus graftonensis* (Meek and Worthen)**

HYPOTYPE YPM 26121

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.5, pl.1, f.7.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Bumastus ioxus* (Hall)**

HYPOTYPE YPM 26116

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.3, pl.1, f.2.

HYPOTYPE YPM 26117

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.3, pl.1, f.3.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville,

Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Bumastus* cf. *B. ioxus* (Hall)**

HYPOTYPE YPM 26118

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.4, pl.1, f.4.

HYPOTYPE YPM 26119

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.4, pl.1, f.5.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Bumastus limbatus* Raymond**

See *Iliaenus indeterminatus* Walcott.

***Bumastus* sp.**

HYPOTYPE YPM 25644

Shrock, R.R. and W.H. Twenhofel. 1939. J. Paleont. v.13, n.3, p.264.

Early Silurian, Pike Arm Fm. Fossiliferous argillite on Fossil Point, Pike Arm, New World Island, 0.25 mi E of canal between Pike and Herring Arms, Newfoundland, Canada. Collector: Twenhofel, W.H., 1936.

***Buttsia drabensis* Wilson**

HOLOTYPE YPM 18541

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.627, pl.89, f.19,21.

HYPOTYPE YPM 18542

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.627, pl.89, f.20,24.

HYPOTYPE YPM 18543

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.627, pl.89, f.12.

Late Cambrian, Gatesburg Fm. Float between 10 and 30 ft above base of member, Drab, on slopes north of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Blair Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18548



Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.627, pl.89, f.23.

Late Cambrian, Conococheague Limestone.  
Massive crystalline limestone 106 ft above basal  
sandy member, 0.5 mi SW of Cushwa Mill, S of  
branch of Rockdale Creek, S of several farm-  
houses N of creek, Williamsport Quad., Washing-  
ton Co., Maryland, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18552

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.627, pl.89, f.22.

Late Cambrian, Gatesburg Fm. Crystalline  
limestone, Imler Quarry, 12 ft above lowest  
exposed beds of Ore Hill Mbr, just E of township  
road to E of Evitt's Mountain, 2.5 mi S of junction  
of this road with Bedford-Rainsburg road at Egoff,  
Colerain Township, Colerain Quad., Huntingdon  
Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Bynumia leptogaster* Raymond**

HOLOTYPE YPM 14756

Raymond, P.E. 1937. Bull. Geol. Soc. Am.  
v.48, p.1121, pl.3, f.19.

Shaw, A.B. 1952. J. Paleont. v.26, n.3,  
p.472, pl.57, f.12.

PARATYPE YPM 14757

Raymond, P.E. 1937. Bull. Geol. Soc. Am.  
v.48, p.1121, pl.3, f.20.

Shaw, A.B. 1952. J. Paleont. v.26, n.3,  
p.473, pl.57, f.13.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl  
Mbr. In limestone pebble, 4.5 mi N of St. Albans,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C. and Prindle, ?.

***Bynumina terrenda* Wilson**

HYPOTYPE YPM 18554

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.628, pl.89, f.11.

Late Cambrian, Gatesburg Fm. 57 ft above base  
of member, Drab, on slopes north of and in low  
road cut at S side of asphalt township road 0.25  
mi W of Drab-Beaverton, Huntingdon Quad.,  
Huntingdon Co., Pennsylvania, USA. Collector:  
Wilson, J.L.

HYPOTYPE YPM 18555

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.628, pl.89, f.8,9.

HYPOTYPE YPM 18556

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.628, tf.1, pl.89, f.7.

Late Cambrian, Gatesburg Fm. Pinkish  
intraformational conglomerate, 68 ft above base  
of member, dolomite ledges in wheat field S of  
Potter Creek, S of old school house on Potter  
Creek, along property line bounding Miller's land,  
just above R. Ferry farmhouse, S of fault, Everett  
Quad., Bedford Co., Pennsylvania, USA.  
Collector: Wilson, J.L.

HYPOTYPE YPM 18557

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.628, pl.89, f.10.

Late Cambrian, Gatesburg Fm. Gray crystalline  
limestone, pinkish intraformational conglomerate,  
49 ft above base of member, Drab, on slopes N  
of and in low road cut at S side of asphalt  
township road 0.25 mi W of Drab-Beaverton,  
Huntingdon Quad., Huntingdon Co., Pennsylvan-  
ia, USA. Collector: Wilson, J.L.

***Calliops leithi* Delo**

SYNTYPE YPM 15193

Delo, D.M. 1940. Spec. Pap. Geol. Soc.  
Am. n.29, p.97, pl.12, f.1.

=*Calyptaulax leithi*. Lectotype. Dean, W.T.  
1979. Bull. Geol. Surv. Can. n.290, p.11,  
pl.6, f.10.†

SYNTYPE YPM 15351

Delo, D.M. 1940. Spec. Pap. Geol. Soc.  
Am. n.29, p.97, pl.12, f.2.††

=*Calyptaulax leithi*. Paralectotype. Dean,  
W.T. 1979. Bull. Geol. Surv. Can. n.290,  
p.11, pl.6, f.9,11,12.†††

SYNTYPE YPM 15352

Delo, D.M. 1940. Spec. Pap. Geol. Soc.  
Am. n.29, p.97, pl.12, f.3.††

=*Calyptaulax leithi*. Paralectotype. Dean,  
W.T. 1979. Bull. Geol. Surv. Can. n.290,  
p.11, pl.6, f.13.††††

Middle Ordovician, Long Point Grp. Three Rocks  
Point, St. George Peninsula, Newfoundland,

Canada. Collector: Dunbar, C.O., Dunbar, C.O., Jr. and Leith, E.I., 1933.

SYNTYPE YPM 15353<sup>††††</sup>

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.97.<sup>††</sup>

=*Calyptaulax leithi*. Paralectotype. Dean, W.T. 1979. Bull. Geol. Surv. Can. n.290, p.11.

Middle Ordovician, Long Point Grp. Three Rocks Point, St. George Peninsula, Newfoundland, Canada. Collector: Dunbar, C.O., Dunbar, C.O., Jr. and Leith, E.I., 1933.

<sup>†</sup>Cited as YPM 15193A.

<sup>††</sup>Cited as YPM 15193.

<sup>†††</sup>Cited as YPM 15193B.

<sup>††††</sup>Cited as YPM 15193C.

<sup>†††††</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

### ***Calvinella obsoleta* Raymond**

HOLOTYPE YPM 14708

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1090, pl.1, f.18.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

### ***Calvinella* sp. ind.**

HYPOTYPE YPM 14760

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1091.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

### ***Calymene altirostris* Foerste**

HYPOTYPE YPM 26138

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.117, pl.9, f.1.

=*Diacalymene altirostris*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.55.

HYPOTYPE YPM 26139

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.117, pl.9, f.2.

=*Diacalymene altirostris*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.55.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

### ***Calymene anchiops* Green**

HYPOTYPE YPM 26734<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.35.

Early Devonian, Schoharie Grit. Ulster Co., New York, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

### ***Calymene blumenbachii* Brongniart**

HYPOTYPE YPM 26729<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.28.

Middle Ordovician, Trenton Limestone. Trenton Falls, Oneida Co., New York, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

### ***Calymene bufo* Green**

HYPOTYPE YPM 26737<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.41.

Middle Devonian, probably Hamilton Grp. NW New Jersey, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

### ***Calymene bufo rana* Green**

HYPOTYPE YPM 26738<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.42.



Middle Devonian, probably Ludlowville Fm. Northern Seneca Lake, Ontario Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Calymene callicephal* Hall**

HYPOTYPE YPM 26730†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.30.

Middle Ordovician, probably Trenton Grp. Hampshire, Virginia, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Calymene clavicula* Campbell**

HYPOTYPE YPM 24877-24879

Campbell, K.S.W. 1967. Bull. Okla. Geol. Surv. n.115, p.24

Late Silurian, Ludlow, Brownsport Fm. "Meniscus Limestone," near Linden, Perry Co., Tennessee, USA. Collector: Braun, F.

***Calymene consimilis* Cooper**

HOLOTYPE YPM 12887

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.385, pl.5, f.24.

=*Diacalymene* sp. aff. *D. consimilis* (Cooper). Hypotype. Lesperance, P.J. 1968. J. Paleont. v.42, n.3, p.817.

=*Diacalymene consimilis*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.58.

PARATYPE YPM 12886†

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.385.

=*Diacalymene* sp. aff. *D. consimilis* (Cooper). Hypotype. Lesperance, P.J. 1968. J. Paleont. v.42, n.3, p.817.

=*Diacalymene consimilis*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.58.

PARATYPE YPM 31224

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.385, pl.5, f.25.††

=*Diacalymene* sp. aff. *D. consimilis* (Cooper). Hypotype. Lesperance, P.J. 1968. J. Paleont. v.42, n.3, p.817.

=*Diacalymene consimilis*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.58.

Late Ordovician, Grande Coupe Beds. Near school, Priest's Road, about 2.5 mi NW of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Northrop, S.A. and Schuchert, C., 8/1927.

†This is a specimen lot of five individuals.

††Cited as YPM 12886.

***Calymene diops* Green**

HYPOTYPE YPM 26735†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.37, pl.f.2.

Probably Ohio.

†This is a replica. The location of the actual specimen has not been determined.

***Calymene intermedia antigonishensis* McLearn**

HOLOTYPE YPM 290

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.162, pl.26, f.9.†

PARATYPE YPM 288

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.162, pl.26, f.5.††

PARATYPE YPM 289

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.162, pl.26, f.8.†††

PARATYPE YPM 291

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.162, pl.26, f.10.††††

Early Devonian, Stonehouse Fm. Zone b of McLearn, along shore, between Stonehouse Brook and McPherson's Brook, SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

†Incorrectly cited as [YPM] 470b.

††Incorrectly cited as [YPM] 470.

†††Incorrectly cited as [YPM] 470a.

††††Incorrectly cited as [YPM] 470c.

***Calymene macrophthalma* Brongniart**

HYPOTYPE YPM 26736†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.39.

Middle Devonian, Mahantango Fm. Lehigh, Carbon Co., Pennsylvania, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Calymene microps* Green**

HYPOTYPE YPM 26733†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.34.

Middle Devonian, Onondaga Grp, probably Columbus Limestone. Ripley, Brown Co., Ohio, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Calymene niagarensis* Hall**

HYPOTYPE YPM 25637

Shrock, R.R. and W.H. Twenhofel. 1939. J. Paleont. v.13, n.3, p.265, pl.30, f.14.

Silurian, Pike Arm Fm. Black argillite on NW shore of Burnt Island, Goldson Arm, New World Island, Newfoundland, Canada. Collector: Twenhofel, W.H.

***Calymene? odontocephala* Green**

HYPOTYPE YPM 26757†

Green, Jacob. 1835. A supplement to the monograph of the trilobites of North America—with coloured models of the species, p.9.

Early Devonian, Schoharie Grit. Ulster Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Calymene platys* Green**

HYPOTYPE YPM 26732†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.32.

Early Devonian, Schoharie Grit. Helderberg Mountains, Albany Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Calymene schucherti* Twenhofel**

HOLOTYPE YPM 7241

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.332, pl.60, f.1.

=*Diacalymene schucherti*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.58.

Edgecombe, G.D. and J.M. Adrain. 1995. Palaeontogr. Abt.A. n.235, p.10.

PARATYPE YPM 7914

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.332.

=*Diacalymene schucherti*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.58.

Edgecombe, G.D. and J.M. Adrain. 1995. Palaeontogr. Abt.A. n.235, p.10.

Early Silurian, Llandoverly, Jupiter Fm. Cape Ottawa, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1919.

PARATYPE YPM 8051, 8179

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.332.

=*Diacalymene schucherti*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.58.

Edgecombe, G.D. and J.M. Adrain. 1995. Palaeontogr. Abt.A. n.235, p.10.

Early Silurian, Llandoverly, Jupiter Fm. 1 mi W of Jupiter River, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 9/1919.

***Calymene selenecephala* Green**

HYPOTYPE YPM 26731†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.31.

Early Silurian, Wenlock, probably Clinton Grp. Western New York, USA.

†This is a replica. The location of the actual specimen has not been determined.



***Calyptraulax compressa* Cooper**

SYNTYPE YPM 12904

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.389, pl.5, f.7.

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.101, pl.12, f.17.

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

SYNTYPE YPM 30466

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.389, pl.5, f.8.†

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.101, pl.12, f.16.†

Late Ordovician, Grande Coupe Beds. Near school, Priest's Road, about 2.5 mi NW of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Northrop, S.A. and Schuchert, C., 8/1927.

†Cited as YPM 12920.

***Calyptraulax glabella* Cooper**

SYNTYPE YPM 11262†

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.388.

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.102.††

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191, pl.4, f.10.†††

SYNTYPE YPM 11264†

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.388.

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.102.††

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191, pl.4, f.8,9.††††

SYNTYPE YPM 11267

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.388, pl.5, f.11.†††††

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.103, pl.12, f.14.

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191, pl.4, f.7.†††

SYNTYPE YPM 12917

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.388.

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.103.

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191.

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Schuchert, C., 8/1929.

SYNTYPE YPM 12918

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.388.

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.103.

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191.

Late Ordovician, Grande Coupe Beds. Grande Coupe, near the mouth of the small brook in a deep gash on the E side of Mount Ste. Anne about 1 mi N of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

SYNTYPE YPM 12920†††††

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.389.

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.103.

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191.

Late Ordovician, Grande Coupe Beds. Near school, Priest's Road, about 2.5 mi NW of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Northrop, S.A. and Schuchert, C., 8/1927.

SYNTYPE YPM 30462

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.388, pl.5, f.9.††††††

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.103, pl.12, f.15.<sup>††</sup>

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191, pl.4, f.4-6.<sup>††††</sup>

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Schuchert, C., 8/1929.

SYNTYPE YPM 30463

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.388, pl.5, f.10.<sup>†††††</sup>

Lectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.103, pl.12, f.13.<sup>††††††</sup>

Lectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191, ff.6, pl.4, f.1-3, 8, 9.<sup>††††</sup>

SYNTYPE YPM 30464, 30465, 34727-34729

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.388.

Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.103.

Paralectotype. Ludvigsen, Rolf and B.D.E. Chatterton. 1982. Can. J. Earth Sci. v.19, n.11, p.2191.

Late Ordovician, Grande Coupe Beds. Grande Coupe, near the mouth of the small brook in a deep gash on the E side of Mount Ste. Anne about 1 mi N of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

<sup>†</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

<sup>††</sup>Cited as YPM 12917; incorrectly designated paratype.

<sup>†††</sup>Cited as YPM 12918b.

<sup>††††</sup>Cited as YPM 12918a.

<sup>†††††</sup>This is a specimen lot of three individuals.

<sup>††††††</sup>Incorrectly cited as YPM 12917.

<sup>†††††††</sup>Cited as YPM 12918; incorrectly designated holotype.

### ***Calyptaulax leithi* Delo**

See *Calliops leithi* Delo.

### ***Camaraspis convexa* (Whitfield)**

HYPOTYPE YPM 18503

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.630, pl.90, f.3, 4.

HYPOTYPE YPM 18504

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.630, pl.90, f.8.

HYPOTYPE YPM 18505

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.630, pl.90, f.2.

HYPOTYPE YPM 18507

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.630, pl.90, f.1.

HYPOTYPE YPM 18581

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.630, pl.90, f.6, 7.

HYPOTYPE YPM 18582

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.630, pl.90, f.5.

Late Cambrian, Gatesburg Fm. Brownish trilobite coquina in pinkish intraformational conglomerate, 36 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

### ***Camaraspoides berkeyi* (Resser)**

HYPOTYPE YPM 18534

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.631, pl.90, f.9.

Late Cambrian, Gatesburg Fm. Brownish trilobite coquina in pinkish intraformational conglomerate, 36 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

### ***Carolinites genacinaca* Ross**

HOLOTYPE YPM 18081

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.84, pl.18, f.29, 33, 36.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured

section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA.  
Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18080

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.84.

PARATYPE YPM 18082

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.84, pl.18, f.26,30,31.

PARATYPE YPM 18083

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.84, pl.18, f.25,34.

PARATYPE YPM 18084

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.84, pl.18, f.28,32,35.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA.  
Collector: Ross, R.J., Jr., 1947.

### ***Catillicephala fowleri* (Shaw)**

HOLOTYPE YPM 18633

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.464, pl.57, f.7.

PARATYPE YPM 18634

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.464.

PARATYPE YPM 18638

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.465.

Middle Cambrian, Rockledge Cgl. Rockledge matrix, Rockledge Estate, 4.4 mi N of St. Albans on W side of St. Albans-Highgate Falls road, St. Albans 7.5 Quad., Franklin Co., Vermont, USA.  
Collector: Shaw, A.B.

### ***Catillicephala lata* (Raymond)**

HYPOTYPE YPM 18630

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.463, pl.57, f.1-3.

Middle Cambrian, Rockledge Cgl. Basal sandy limestone, 3.5 mi N of St. Albans on W side of St. Albans-Highgate Falls road, St. Albans 7.5 Quad., Franklin Co., Vermont, USA. Collector: Shaw, A.B.

HYPOTYPE YPM 18631

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.463.

Middle Cambrian, Rockledge Cgl. Rockledge float (pebble 3), Rockledge Estate, 4.4 mi N of St. Albans on W side of the St. Albans-Highgate Falls road, St. Albans 7.5 Quad., Franklin Co., Vermont, USA. Collector: Shaw, A.B.

HYPOTYPE YPM 18632

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.463.

Middle Cambrian, Rockledge Cgl. Sandstone bed about 30 ft above Rockledge base, 3.5 mi N of St. Albans on W side of the St. Albans-Highgate Falls road, St. Albans 7.5 Quad., Franklin Co., Vermont, USA. Collector: Shaw, A.B.

HYPOTYPE YPM 18635, 18636, 18639, 18640, 18642

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.463.

Middle Cambrian, Rockledge Cgl. Rockledge matrix, Rockledge Estate, 4.4 mi N of St. Albans on W side of St. Albans-Highgate Falls road, St. Albans 7.5 Quad., Franklin Co., Vermont, USA. Collector: Shaw, A.B.

See also *Caephalocoelia ovoides* Raymond.

***Celtencrinurus laurentinus* (Twenhofel)**  
See *Encrinurus laurentinus* Twenhofel.

### ***Centroleura vermontensis* Howell**

PARATYPE YPM 13416-13418

Howell, B.F. 1932. Bull. Wagner Free Inst. Sci. v.7, n.1, p.7.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1170.

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA.  
Collector: Schuchert, C.

PARATYPE YPM 13419

Howell, B.F. 1932. Bull. Wagner Free Inst. Sci. v.7, n.1, p.7.



Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1170.

PARATYPE YPM 13420

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1170.

Howell, B.F. 1932. Bull. Wagner Free Inst. Sci. v.7, n.1, p.7.

PARATYPE YPM 13435A

Howell, B.F. 1932. Bull. Wagner Free Inst. Sci. v.7, n.1, p.7.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1170.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Cephalocoelia ovoides* Raymond**

HOLOTYPE YPM 14759

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1124, pl.3, f.22.†

=*Catillicephala lata* (Raymond). Hypotype. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.463.

Late Cambrian, Rockledge Cgl. 4.5 mi N of St. Albans, in matrix of Hungerford, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Prindle, ?.

†Not 14659 as published on p.1124 and in the explanation for pl.3, f.22.

***Cephalocoelia? simplex* Raymond**  
See *Ucebia simplex* Raymond.

***Ceratocephala depauperata* Van Ingen**

HYPOTYPE YPM 26136

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.22, pl.1, f.22.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Ceratocephala goniata* Warder**

HYPOTYPE YPM 13354

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.238, pl.28, f.2.

Early Silurian, Wenlock, La Vieille Fm. Near the top of the limestone, ridge W of Port Daniel RR station, which extends from Clemville N to Barrachois, Quebec, Canada. Collector: Schuchert, C., 8/1923.

***Ceratocephala nodulata* Van Ingen**

HYPOTYPE YPM 26137

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.24, pl.1, f.23.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Ceraurinus elongatus* Cooper**

SYNTYPE YPM 12906†

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.384.

Late Ordovician, Grande Coupe Beds. Near school, Priest's Road, about 2.5 mi NW of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Northrop, S.A. and Schuchert, C., 8/1927.

†This is a specimen lot of 2 individuals.

***Ceraurus pleurexanthemus* Green**

HYPOTYPE YPM 26754†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.84, pl.f.10.

Middle Ordovician, Trenton Grp. Newport, Herkimer Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Ceraurus pompilius* Billings**

HYPOTYPE YPM 23296

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.365, pl.14, f.14.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.240, pl.36, f.14.

Middle Ordovician, Crown Point Limestone. Middle to upper part of formation, Sloop Bay, ledges near water in center of bay shore in dark gray, hard limestone with much pyrite, Shaw (1968) loc. V114, Valcour Island, Lake Champlain, Clinton Co., New York, USA.

***Champlainia rectimargo* Howell**

PARATYPE YPM 13433A

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1186.<sup>†</sup>

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

<sup>†</sup>Howell (1937) refers to this species (*Conoides edisoni*, YPM 13433B) as being on this slab with *Champlainia rectimargo* (YPM 13433A) and *Elrathia longa* (YPM 13433C); however, only *Champlainia rectimargo* (YPM 13433A) is present.***Chancia* sp. undet.**

HYPOTYPE YPM 16022

Kindle, C.H. 1942. Am. J. Sci. ser.4, v.240, n.9, p.637, pl.1, f.25.<sup>†</sup>

HYPOTYPE YPM 17094

Kindle, C.H. 1942. Am. J. Sci. ser.4, v.240, n.9, p.637, pl.2, f.8.<sup>†</sup>

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspe, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.

<sup>†</sup>The magnification for pl.2, f.25 is about x3, not x4 as stated in the plate explanation.***Chariocephalus peloris* Raymond**

HOLOTYPE YPM 14749

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1119, pl.3, f.12.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Chasmops anticostiensis* Twenhofel**

HYPOTYPE YPM 10401

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.336, pl.60, f.5.<sup>†</sup>Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.106, pl.13, f.13.<sup>††</sup>

Late Ordovician, Ellis Bay Fm. Cliff 0.5 mi E of Junction Cliff, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

HYPOTYPE YPM 13374<sup>†††</sup>

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.105.

HYPOTYPE YPM 14000<sup>†††</sup>Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.105, pl.14, f.15, 16.<sup>††††</sup>

Late Ordovician. Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1919.

<sup>†</sup>F.5 on pl.60 incorrectly labeled as f.4.<sup>††</sup>Delo (1940) apparently was unaware that pl.60 was labeled incorrectly when he refigured this specimen as *Chasmops occidentalis*.<sup>†††</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.<sup>††††</sup>Incorrectly cited as W.H. Twenhofel, No. 751.***Chasmops cf. truncato-caudatus* (Portlock)**

MENTIONED YPM 25646

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.338

Late Ordovician, Ellis Bay Fm. Ellis Bay, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Cheilocephalus buttsi* Resser**

HYPOTYPE YPM 18515

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.631, pl.91, f.19.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Cheilocephalus* sp. undet.**

HYPOTYPE YPM 18600

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.631, pl.95, f.6, 7.

Late Cambrian, Gatesburg Fm. Dark limestone near middle of member, about 25 ft above 45-2w.2, Ore Hill Quarry, quarry 0.25 mi E of crossroads of PA Hwy 686 and road leading E to Ore Hill, S of road, Bloomfield Township, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Cheirurus niagarensis* Hall**

HYPOTYPE YPM 26140

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.120, pl.9, f.3.

=*Cheirurus phollikodus* Holloway. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.29.

HYPOTYPE YPM 26141

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.120, pl.9, f.4.

=*Cheirurus phollikodus* Holloway. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.29.

HYPOTYPE YPM 26142

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.120, pl.9, f.5.

=*Cheirurus phollikodus* Holloway. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.29.

HYPOTYPE YPM 26143

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.120, pl.9, f.6.

=*Cheirurus phollikodus* Holloway. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.29.

HYPOTYPE YPM 26144

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.120, pl.9, f.7.

=*Cheirurus phollikodus* Holloway. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.29.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Cheirurus nuperus* Billings**

HYPOTYPE YPM 8181

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.333.

HYPOTYPE YPM 10394

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.333, pl.54, f.5,6.

Early Silurian, Llandovery, Jupiter Fm. Cliff 1 mi W of Jupiter River, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Cheirurus phollikodus* Holloway**  
See *Cheirurus niagarensis* Hall.

***Cheirurus tarquinius* Billings**

HYPOTYPE YPM 13346

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.27, f.4.

Early Silurian, Llandovery, West Point Fm. Lower pink limestone, Reddish Point, W of Gascons, Quebec, Canada. Collector: Schuchert, C., 8/1923.

HYPOTYPE YPM 13347

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.27, f.2.

HYPOTYPE YPM 13348

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.27, f.7.

HYPOTYPE YPM 13349

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.28, f.6.

Kindle, C.H. 1945. J. Paleont. v.19, n.5, p.532.

HYPOTYPE YPM 14890

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.27, f.5.

HYPOTYPE YPM 14891

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.27, f.1.

HYPOTYPE YPM 25667

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.28, f.6.

HYPOTYPE YPM 30862

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.28, f.3.

HYPOTYPE YPM 30863



Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.28, f.4.

**HYPOTYPE** YPM 30864

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.28, f.5.

Early Silurian, Llandovery, West Point Fm.  
Mahan's Limekiln, Indian Point, Quebec, Canada.  
Collector: Northrop, S.A., 1927.

***Clelandia utahensis* Ross**

**HOLOTYPE** YPM 18192

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.117, pl.29, f.1-3.

**PARATYPE** YPM 18193

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.117, pl.29, f.8-9.

**PARATYPE** YPM 18194

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.117.

**PARATYPE** YPM 18195

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.117, pl.29, f.4,6,7.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

**PARATYPE** YPM 18196

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.117.

Early Ordovician, Garden City Fm, Zone B. Float, 98-118 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Cliffia lataegenae* (Wilson)**

**HYPOTYPE** YPM 18467

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.90, f.18.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18469

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.90, f.24.

Late Cambrian, Gatesburg Fm. Gray crystalline limestone, pinkish intraformational conglomerate, 49 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18470

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.90, f.20,21.

Late Cambrian, Gatesburg Fm. Dark limestone on quarry rim on W side, Ore Hill Quarry, quarry 0.25 mi E of crossroads of PA Hwy 686 and road leading E to Ore Hill, S of road, Bloomfield Township, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18471

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.90, f.22.

Late Cambrian, Gatesburg Fm. Dark aphanitic limestone 72 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18473

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.90, f.19.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18474

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.90, f.23.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 68 ft above base of member, dolomite ledges in wheat field S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Coleopachys pisum* Raymond**

HOLOTYPE YPM 14750

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1120, pl.3, f.16.

=*Meteoraspis?* *minuta* (Raymond).

Hypotype. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.475, pl.57, f.10.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Sandy limestone at base of conglomerate, 3.5 mi N of St. Albans, 1 mi S of Rockledge, Franklin Co., Vermont, USA. Collector: Schuchert, C., Keith, A., and Prindle, ?.

***Coleopachys strix* Raymond**

HOLOTYPE YPM 14751

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1120, pl.3, f.14.

=*Meteoraspis?* *minuta* (Raymond).

Hypotype. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.475, pl.57, f.8.

PARATYPE YPM 14752

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1120, pl.3, f.15.

=*Blountia* (*Homodictya*) *imitatrix* (Raymond). Hypotype. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.473, pl.57, f.25.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. In limestone pebble, 4.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Prindle, ?.

***Colobininus julius* (Billings)**

HYPOTYPE YPM 13050

Whittington, H.B. 1961. J. Paleont. v.35, n.5, p.920.

HYPOTYPE YPM 22406A

Whittington, H.B. 1961. J. Paleont. v.35, n.5, p.920, pl.102, f.4,5.

HYPOTYPE YPM 22406B, 22406C

Whittington, H.B. 1961. J. Paleont. v.35, n.5, p.920.

Middle Ordovician, Cow Head Grp. Lower Table Head fossils from great limestone blocks, Lower Head, which is 3.5 mi N of Cow Head, western Newfoundland, Canada. Collector: Schuchert, C. and Dunbar, C.O., 8/4/1918.

***Conaspis perseus* Hall**

HYPOTYPE YPM 18560

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.650, pl.95, f.1.

Late Cambrian, Gatesburg Fm. Dark platy limestone, Imler Quarry, 166 ft above lowest exposed beds of Ore Hill Mbr, just E of township road to E of Evitt's mountain, 2.5 mi S of junction of this road with Bedford-Rainsburg road at Egoff, Colerain Township, Colerain Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Conaspis? retractalabra* Wilson**

HOLOTYPE YPM 18594A, 18594B

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.650, pl.95, f.19,20.

Late Cambrian, Gatesburg Fm. Dark limestone ledges N of fault, 190 ft above base of member, S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Coniproetus* sp. aff. *affinis* Boucek**

HYPOTYPE YPM 33873

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, tf.24.9,10,12.

Devonian, Grand Greve Limestone. Grand Greve, E end of Gaspé Peninsula, Quebec, Canada. Collector: Twenhofel, W.H.

***Coniproetus bohemicus* (Hawle and Corda)**

HYPOTYPE YPM 33791-33793

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.32.

HYPOTYPE YPM 33794

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.32, tf.9.4,6,7.

HYPOTYPE YPM 33795, 33796

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.32.

HYPOTYPE YPM 33797

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.32, tf.9.8-10.

HYPOTYPE YPM 33798

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.32, tf.9.1-3.

HYPOTYPE YPM 33799, 33800

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.32.

Early Devonian, Etage Ff2. Koneprusy, Bohemia, Czech Republic.

### ***Conoides edsoni* Howell**

PARATYPE YPM 13433B†

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1195.††

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13434A

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1196.†††

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

††Howell (1937) refers to this species (*Conoides edsoni*, YPM 13433B) as being on this slab with *Champlainia rectimargo* (YPM 13433A) and *Elrathia longa* (YPM 13433C); however, only *Champlainia rectimargo* (YPM 13433A) is present.

†††Howell (1937) refers to *Conoides edsoni*, YPM 13434A as being on this slab with *Elrathia longa* (YPM 13434B); however, it appears that only *Conoides edsoni* (YPM 13434A) is present.

### ***Constantina pulchra* Cisne**

HOLOTYPE YPM 26290

Cisne, J.L. 1970. J. Paleont. v.44, n.3, p.522, tf.1,2.

Late Devonian, Conewango Stage. Glacial drift, Warren, Warren Co., Pennsylvania, USA. Collector: Randall, F.A.

### ***Coosella helena* Lochman**

HOLOTYPE YPM 15814

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468, pl.57, f.10,15.

PARATYPE YPM 15815

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468, pl.57, f.9.

PARATYPE YPM 15816

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468, pl.57, f.13,14.

PARATYPE YPM 15817

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468.

PARATYPE YPM 15818

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468, pl.57, f.11,12.

PARATYPE YPM 15819, 15820, 30485-30493, 31340

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468.

Middle Cambrian, March Point Fm. Zone 24, March Point section, to the E along shore, St. George Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O. and Leith, E.I., 1933.

### ***Coosia* sp.**

HYPOTYPE YPM 15824

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468

HYPOTYPE YPM 15825

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468, pl.57, f.39,40

HYPOTYPE YPM 30494

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468



Middle Cambrian, March Point Fm. Zone 24, March Point section, to the E along shore, St. George Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O. and Leith, E.I., 1933.

***Coosia?* sp.**

See *Homodictya imitatrix* Raymond.

***Cornuproetus beecheri* (Ruedemann)**

HYPOTYPE YPM 27810

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.13.

=*Decoroproetus beecheri*. Edgecombe, G.D., B.D.E. Chatterton, N.E. Vaccari and B.G. Waisfield. 1997. J. Paleont. v.71, n.3, p.431, ff.10.1,10.2.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Valiant, W.S., 1892.

***Corydocephalus consanguinensis* (Clarke)**

See *Phaethonides* sp.

***Corydocephalus depauperatus* Van Ingen**

HYPOTYPE YPM 26128

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.13, pl.1, f.15.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Corynexochus juvenis* Raymond**

HOLOTYPE YPM 4714

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.421, pl.13, f.10.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.165, pl.13, f.10.

=*Hemirhodon juvenis*. Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1106.

Middle Ordovician. Zone 2, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Crassiproetus crassimarginatus* (Hall)**

HYPOTYPE YPM 33808

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.71, ff.18.1-3.

Middle Devonian, Onondaga Grp, Jeffersonville Limestone. Jefferson Co., Kentucky, USA.

HYPOTYPE YPM 33809, 33811

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.71.

Middle Devonian, Onondaga Grp, Jeffersonville Limestone. Clark Co., Indiana, USA.

***Crassiproetus halliturgidus* Lieberman**

HOLOTYPE YPM 33825

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.83, ff.21.5-7.

Middle Devonian, Onondaga Grp, Jeffersonville Limestone. Jefferson Co., Kentucky, USA.

***Crassiproetus traversensis* Stumm**

HYPOTYPE YPM 33807

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.69.

Middle Devonian, Onondaga Grp, Jeffersonville Limestone. Jefferson Co., Kentucky, USA.

HYPOTYPE YPM 33810, 33812

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.69.

Middle Devonian, Onondaga Grp, Jeffersonville Limestone. Clark Co., Indiana, USA.

HYPOTYPE YPM 33826

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.69.

Middle Devonian, Onondaga Grp, Jeffersonville Limestone. Clarke Co., Indiana, USA.

HYPOTYPE YPM 33827

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.69, ff.16.1-3.

HYPOTYPE YPM 33828

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.69, ff.15.4-6.

HYPOTYPE YPM 33830, 33831

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.69.

Middle Devonian, Onondaga Grp, Jeffersonville Limestone. Waverly, Morgan Co., Indiana, USA. Collector: Raymour, E.H.

HYPOTYPE YPM 33841

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.69.

Middle Devonian, Onondaga Grp, Columbus Limestone. Columbus, Franklin Co., Ohio, USA.

***Crepicephalus (Loganellus) montanensis* Whitfield**

HOLOTYPE YPM 3127

Whitfield, R.P. 1876. U.S. War Dept. p.141, pl.1, f.1,2.

Whitfield, R.P. 1899. Ann. N.Y. Acad. Sci. v.12, n.8, v.12, n.8, p.182.<sup>†</sup>

Late Cambrian, Gallatin Grp, Pilgrim Dol. Limestone overlying quartzite in the northernmost limestone ridge, [1-2 mi NE of] Camp Baker [Fort Logan or a point that is now 1 mi W of Fort Logan], Meagher Co., Montana, USA. Collector: Dana, E.S. and Grinnell, G.B., 8/4/1875.

<sup>†</sup>Designated as "type"; USNM incorrectly designated as the repository.

***Crepicephalus* sp.**

HYPOTYPE YPM 15845

Lochman, C. 1938. J. Paleont. v.12, n.5, p.471, pl.57, f.16.

=*Tricrepicephalus johnsoni* Kindle. Hypotype. Kindle, C.H. 1948. Am. J. Sci. v.246, p.449.

HYPOTYPE YPM 26844, 30495

Lochman, C. 1938. J. Paleont. v.12, n.5, p.471.

Late Cambrian, Shallow Bay Fm, probably Downes Point Mbr. Upper Cambrian blocks in Cow Head, from outer of Gulf side of Cow Head Peninsula, Cow Head, western Newfoundland, Canada. Collector: Schuchert, C., Dunbar, C.O. and Edwards, W.S., 7/30/1918.

***Crepicephalus tripunctatus* (Whitfield)**

See *Arionellus tripunctatus* Whitfield.

***Crepichilella antietamensis* Wilson**

HOLOTYPE YPM 18596

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.651, pl.95, f.9,10.

HYPOTYPE YPM 18595

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.651, pl.95, f.8.

HYPOTYPE YPM 18597

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.651, pl.95, f.12.

Late Cambrian, Conococheague Limestone. Distorted platy limestone, W side of road N from General Mansfield monument, 553 ft above basal sandy member, Antietam Battlefield, W axis of syncline between Smoketown road and East Woods, crosses Mansfield Avenue 250 yards E of Hagerstown Pike, N of Sharpsburg, Washington Co., Maryland, USA. Collector: Wilson, J.L.

***Cryptolithus bellulus* (Ulrich)**

HYPOTYPE YPM 26302

Whittington, H.B. 1941. J. Paleont. v.15, n.1, p.30, pl.5, f.1.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

***Cryptolithus terryi* Leith**

HOLOTYPE YPM 15317

Leith, E.I. 1938. Am. J. Sci. ser.5, v.36, n.215, p.341, tf.2.

=*Onnia terryi*. Whittington, H.B. 1954. Breviora (Mus. Comp. Zool., Harvard Univ.) n.38, p.1, pl.1, f.3.

Ordovician, Caparo-Bellavista series. First hill outside the Caparro River floodplain, about 0.75 mi S of the river along the trail between Santa Barbara and Mucuchachi, Andes Mountains, Venezuela. Collector: Terry, R.A.

***Cryptolithus tessellatus* Green**

HYPOTYPE YPM 231

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.62, pl.8, f.1.

Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.211.

HYPOTYPE YPM 232

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.8, f.2.

HYPOTYPE YPM 233

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.62, tf.45(upper), pl.7, f.1.

Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.209.

HYPOTYPE YPM 234

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.6, f.7.

HYPOTYPE YPM 237

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.8, f.5.

HYPOTYPE YPM 238

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.162, tf.46, pl.8, f.4.

Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.210.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

HYPOTYPE YPM 26751<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.73, pl.1, f.4.

Middle Ordovician, Trenton Limestone. Trenton Falls, Oneida Co., New York, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

See *Trinucleus concentricus* Eaton.

### ***Cybele mira* (Billings)**

HYPOTYPE YPM 23327

Howell, B.F. 1947. Bull. Wagner Free Inst. Sci. v.22, n.2, p.12, pl.1, f.3.

=*Miracybele mira*. Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.424.

=*Cybelurus mira*. Bursky, A.Z. 1970. Inst. Geol. Arktiki. Leningrad. p.129.

Dean, W.T. 1973. Bull. Geol. Surv. Can. n.233, p.10.

Tripp, R.P. 1976. Trans. Roy. Soc. Edinburgh. v.69, p.407.

Fortey, R.A. 1980. Norsk Polarinst. Sk. n.171, p.94.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 2, upper Table Head, Normanskill, S base of Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 8/5/1910.

HYPOTYPE YPM 26997

Howell, B.F. 1947. Bull. Wagner Free Inst. Sci. v.22, n.2, p.12, pl.1, f.4.<sup>†</sup>

Middle Ordovician, Table Head Grp. *Ampyx-Agnostus* horizon, upper Table Head, Normanskill, the upended fault block between Bell Burns and Table Head, western Newfoundland, Canada. Collector: Schuchert, C., 8/13/1918.

<sup>†</sup>Incorrectly cited as 3450/36.

### ***Cybele prima* Raymond**

See *Cybele valcourensis* Raymond.

### ***Cybele valcourensis* Raymond**

SYNTYPE YPM 23303

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.362, pl.14, f.9.

=*Cybele prima* Raymond. Hypotype. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.237, pl.36, f.9.

Middle Ordovician, Chazy Grp. Quarries near Valcour, Valcour Island, Lake Champlain, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

### ***Cybelurus mira* (Billings)**

See *Cybele mira* (Billings) and *Miracybele mira* (Billings).

### ***Cyclopyge insolens* Cooper**

SYNTYPE YPM 12919



Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.380.

SYNTYPE YPM 31249

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.380, pl.5, f.16.<sup>†</sup>

SYNTYPE YPM 31250

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.380, pl.5, f.17.<sup>†</sup>

Late Ordovician, Grande Coupe Beds. Grande Coupe, near the mouth of the small brook in a deep gash on the E side of Mount Ste. Anne about 1 mi N of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Northrop, S.A., 8/1927.

<sup>†</sup>Cited as YPM 12919.

***Cyclopyge kindlei* Cooper**

PARATYPE YPM 12910<sup>†</sup>

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.378.

PARATYPE YPM 31247

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.378, pl.5, f.18.<sup>††</sup>

PARATYPE YPM 31248

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.378, pl.5, f.19.<sup>†</sup>

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

<sup>†</sup>This is a specimen lot of three individuals.

<sup>††</sup>Cited as YPM 12910.

***Cyclopyge* sp.**

HYPOTYPE YPM 12912

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.381, pl.5, f.23.

Late Ordovician, Grande Coupe Beds. Grande Coupe, near the mouth of the small brook in a deep gash on the E side of Mount Ste. Anne about 1 mi N of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

***Cyphaspis anticostiensis* Hall**

HYPOTYPE YPM 25645

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.325, pl.57, f.3.

Late Ordovician, Ellis Bay Fm. Ellis Bay, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Cyphaspis* cf. *christi* Hall**

HYPOTYPE YPM 24752

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.32.

Early Silurian, Wenlock, Chicotte Fm. Jumpers, Anticosti Island, Quebec, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 6/1908.

***Cyphaspis minima* Cooper**

SYNTYPE YPM 12916

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.377.

SYNTYPE YPM 31264

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.377, tf.5, pl.5, f.12.<sup>†</sup>

Late Ordovician, Grande Coupe Beds. Grande Coupe, near the mouth of the small brook in a deep gash on the E side of Mount Ste. Anne about 1 mi N of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

<sup>†</sup>Cited as YPM 12916.

***Cyphaspis spinulocervix* Foerste**

HYPOTYPE YPM 26127

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.11, pl.1, f.13.

=*Harpidella spinulocervix*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.26.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Dalmanites arkansana* Van Ingen**

HYPOTYPE YPM 26147

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.123, pl.10, f.12.

=*Lygdozoon collatum* Holloway. Hypotype. Holloway, D.J. 1981. Palaeont. v.24, pt.4, p.717.

HYPOTYPE YPM 26148

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.123, pl.10, f.13.

=*Lygdozoon collatum* Holloway. Hypotype. Holloway, D.J. 1981. Palaeont. v.24, pt.4, p.717.

HYPOTYPE YPM 26149

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.123, pl.10, f.14.

=*Lygdozoon collatum* Holloway. Hypotype. Holloway, D.J. 1981. Palaeont. v.24, pt.4, p.717.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Dalmanites caudatus jupiterensis* Twenhofel**

HOLOTYPE YPM 22763

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.335, pl.60, f.2.

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.40, pl.4, f.6.<sup>†</sup>

=*Dalmanites jupiterensis*. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.70.

Early Silurian, Llandovery, Jupiter Fm. Cliff E of Jupiter River, Anticosti Island, Quebec, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 6/1908.

<sup>†</sup>Incorrectly cited as 223.

***Dalmanites dentata* Barrett**

SYNTYPE YPM 28077<sup>†</sup>

Barrett, S.T. 1876. Am. J. Sci. ser.3, v.11, n.63, p.200, pl.7.

Early Devonian, Helderberg Grp. Lower Helderberg Grp, Port Jervis. Orange Co., New York, USA. Collector: Barrett, S.T.

<sup>†</sup>This is a replica. The location of the actual specimen is unknown.

***Dalmanites howelli* Ulrich and Delo**  
See *Dalmanites* cf. *D. vigilans* Hall and *Dalmanites* sp.

***Dalmanites jupiterensis* Twenhofel**  
See *Dalmanites caudatus jupiterensis* Twenhofel.

***Dalmanites purduei* Dunbar**

SYNTYPE YPM 9710<sup>†</sup>

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv. n.21, tbl.(p.54).

Dunbar, C.O. 1920. Trans. Conn. Acad. Arts Sci. v.23, p.148, pl.5, f.2.

=*Odontochile purduei*. Lectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.62, pl.6, f.1.<sup>††</sup>

Early Devonian, Linden Grp, Olive Hill Fm. Whitlow's Branch, 3 mi E of Cerro Gordo, on the Olive Hill Road, Hardin Co., Tennessee, USA. Collector: Dunbar, C.O., 1916.

SYNTYPE YPM 9711<sup>†</sup>

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv. n.21, tbl.(p.54).

Dunbar, C.O. 1920. Trans. Conn. Acad. Arts Sci. v.23, p.148, pl.5, f.1.

=*Odontochile purduei*. Paralectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.62.

Early Devonian, Linden Grp, Olive Hill Fm. Lower 10 ft, bluff on Indian Creek, 0.5 mi NE of Olive Hill, Hardin Co., Tennessee, USA. Collector: Dunbar, C.O., 1916.

SYNTYPE YPM 25580<sup>†</sup>

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv. n.21, tbl.(p.54).

Dunbar, C.O. 1920. Trans. Conn. Acad. Arts Sci. v.23, p.148.<sup>††</sup>

<sup>†</sup>*Dalmanites purduei* is a nomen nudum. Dunbar (1919) uses the manuscript name, *Dalmanites purduei* for his faunal chart but does not describe this taxon until later (Dunbar, 1920).

<sup>††</sup>Cited as holotype on p.62.

<sup>†††</sup>This is the specimen that is referred to as "A smaller entire individual [which] has a length overall of about 120 mm" on p.149. No locality information is available for this specimen. Dunbar (1920) lists the "Occurrence" for this taxon as "Ross limestone, at Olive Hill, Pyburns Bluff, and other localities in Hardin County."

***Dalmanites retusus* Dunbar**

HOLOTYPE YPM 9676<sup>†</sup>

Dunbar, C.O. 1918. Am.J.Sci. ser.4, v.46, p.743.

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv. n.21, p.59,tbl(p.54), pl.2, f.19.

Dunbar, C.O. 1920. Trans. Conn. Acad. Arts Sci. v.23, p.149, pl.5, f.3.

Early Devonian, Helderbergian, Linden Grp, Birdsong Shale. Swaynes Mill, Henry Co., Tennessee, USA. Collector: Pate, F.W.

†*Dalmanites retusus* is a nomen nudum. Dunbar (1918) uses the manuscript name, *Dalmanites retusus*, for his faunal chart but does not describe this taxon until later (Dunbar, 1920).

### ***Dalmanites rutellum* Campbell**

HYPOTYPE YPM 24882-24884

Campbell, K.S.W. 1967. Bull. Okla. Geol. Surv. n.115, p.39.

Late Silurian, Ludlow, Hunton Grp, Henryhouse Limestone. Barren slope 100 ft NE of B4157, Cedar Bluff sec., Arbuckle Mountains, NW corner NE1/4sec09,T02N,R06E, Pontotoc Co., Oklahoma, USA. Collector: Reeds, C.A., 1905.

### ***Dalmanites* sp.**

HYPOTYPE YPM 308

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.170, pl.28, f.5.†

Late Silurian, McAdam Fm. 25 or so ft above iron ore bed, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Weston, T.C.

HYPOTYPE YPM 26151

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.128, pl.10, f.16.

HYPOTYPE YPM 26152

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.128, pl.10, f.17.

=*Dalmanites howelli* Ulrich and Delo. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.67.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

†Incorrectly cited as YPM 482.

### ***Dalmanites (Probolium) tridens* Hall**

HYPOTYPE YPM 6659

Clarke, J.M. 1908. Mem. New York St. Mus. n.9,pt.1, p.129, pl.5, f.1.

=*Probolium tridens*. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.78.

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarkesville, Albany Co., New York, USA. Collector: Beecher, C.E.

### ***Dalmanites* cf. *D. vigilans* Hall**

HYPOTYPE YPM 26150

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.126, pl.10, f.15.

=*Ommokris bassleri* (Ulrich and Delo). Hypotype. Holloway, D.J. 1981. Palaeont. v.24,pt.4, p.702.

HYPOTYPE YPM 26153

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.128, pl.10, f.18.

=*Dalmanites howelli* Ulrich and Delo. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.67.

HYPOTYPE YPM 26154

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.128, pl.10, f.19.

=*Dalmanites howelli* Ulrich and Delo. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.67.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

### ***Dalmanites vigilans* Hall**

HYPOTYPE YPM 13063

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.244.

Early Silurian, Llandovery, Clemville Fm. First set of exposures between Clemville bridge and dam, Little Port Daniel River, Quebec, Canada. Collector: Northrop, S.A., 1927.



***Dalmanites weaveri* (Salter)**

HYPOTYPE YPM 294

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.169, pl.27, f.7.<sup>†</sup>Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.53.<sup>†</sup>

HYPOTYPE YPM 295

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.169, pl.27, f.8.<sup>†</sup>Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.53, pl.4, f.9.<sup>†</sup>

HYPOTYPE YPM 296

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.169, pl.27, f.9.<sup>†</sup>Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.53, pl.4, f.8.<sup>†</sup>

HYPOTYPE YPM 297

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.169, pl.27, f.10.<sup>†</sup>Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.53, pl.4, f.7.<sup>†</sup>

Early Silurian, Ross Brook Fm. Zone e of McLearn, along shore, between Black Point and Smith Brook, SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

<sup>†</sup>Cited as [YPM] 473 though 473c.***Dalmanitina logani* (Hall)**

HYPOTYPE YPM 307

McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.167, pl.27, f.6.<sup>†</sup>=*Scotiella logani*. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.33, pl.2, f.16.<sup>†</sup>=*Scotiella logani*. Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.2, f.1,2.<sup>††</sup>

Early Devonian, Stonehouse Fm. Zone b of McLearn, along shore, between Stonehouse Brook and McPherson's Brook, SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

<sup>†</sup>Incorrectly cited as [YPM] 481.<sup>††</sup>Incorrectly cited as [YPM] 480.***Dalmanitina logani* var. *conservatrix* McLearn**

SYNTYPE YPM 293

McLearn, F.H. 1918. Ottawa Nat. v.32, n.2, p.33.<sup>†</sup>Lectotype. McLearn, F.H. 1924. Mem. Can. Geol. Surv. n.118, p.168, pl.27, f.1.<sup>†† †††</sup>=*Scotiella logani* var. *conservatrix*.Lectotype. Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.34, pl.2, f.19.<sup>†† †††</sup>=*Scotiella conservatrix*. Lectotype.Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.4, pl.1, f.1-2.<sup>†† ††††</sup>

Early Devonian, Stonehouse Fm. Zone b of McLearn, along shore, between Stonehouse Brook and McPherson's Brook, SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

<sup>†</sup>A type series is not designated, but multiple specimens are referred to on p.33 under the headings "Collections."<sup>††</sup>Incorrectly cited as [YPM] 472.<sup>†††</sup>McLearn (1918) did not designate a holotype, but in 1924 designated a lectotype by the inference of a holotype on p.168.<sup>††††</sup>Delo (1940) refers to this specimen as the holotype.<sup>††††</sup>Shergold (1967) declares *Dalmanitina logani* var. *conservatrix* McLearn (1918) a nomen nudum but does recognize *Dalmanitina logani* var. *conservatrix* McLearn (1924) as a valid name in his synonymy of *Scotiella conservatrix*.***Deadwoodia duris* (Walcott)**

HYPOTYPE YPM 18499

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.92, f.5.

Late Cambrian, Gatesburg Fm. Float near middle of Ore Hill, Ore Hill Quarry, quarry 0.25 mi E of crossroads of PA Hwy 686 and road leading E to Ore Hill, S of road, Bloomfield Township, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18500**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.92, f.3,4.

Late Cambrian, Gatesburg Fm. Dark limestone near middle of member, about 25 ft above 45-2w.2, Ore Hill Quarry, quarry 0.25 mi E of crossroads of PA Hwy 686 and road leading E to Ore Hill, S of road, Bloomfield Township, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18501**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.633, pl.92, f.1.†

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 68 ft above base of member, dolomite ledges in wheat field S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE USNM 222668††**

Wilson, J.L. 1948. J. Paleont. v.22, n.1, p.33, pl.8, f.12.

**HYPOTYPE USNM 222669††**

Wilson, J.L. 1948. J. Paleont. v.22, n.1, p.33, pl.8, f.13-15.

**HYPOTYPE USNM 222670††**

Wilson, J.L. 1948. J. Paleont. v.22, n.1, p.33, pl.8, f.16,17.

†Not 18599 as stated on p.634 and in the explanation for pl.92, f.1.

††These specimens are not in the Invertebrate Paleontology Collections at Yale University's Peabody Museum as reported by Wilson (1948). They are at the National Museum of Natural History, Smithsonian Institution.

***Dechenella haldemani* (Hall)**

**HYPOTYPE YPM 33838**

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.118, tf.34.9

**HYPOTYPE YPM 33839, 33840**

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.118.

Middle Devonian, Hamilton Grp, Marcellus Shale, Cherry Valley Limestone Mbr. Herkimer Co., New York, USA.

***Dechenella verneuili* (Barrande)**

**HYPOTYPE YPM 33850, 33851**

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.125.

**HYPOTYPE YPM 33852**

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.125, tf.35.9-11.

**HYPOTYPE YPM 33854**

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.125, tf.35.12.

Middle Devonian, Eifel Limestone. Between Pelm and Gerolstein, Eifel, Germany.

***Deckera completa* Wilson**

**SYNTYPE YPM 18563**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.634, pl.90, f.10.†

**SYNTYPE YPM 18566**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.634, pl.90, f.16-17.††

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18564**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.634, pl.90, f.11-13.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18565**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.634.

**HYPOTYPE YPM 18567**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.634, pl.90, f.14.<sup>†††</sup>

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina with pinkish intraformational conglomerate, 32 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18568

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.634, pl.90, f.15.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 77 ft above base of member, W of wooded ridge with Hawkenberry cabin, in wooded copse, S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

<sup>†</sup>Not 18565 as stated on p.634 and in the explanation for pl.90, f.10.

<sup>††</sup>The image is reversed in pl.90, f.16-17.

<sup>†††</sup>Cited as 18557 in the explanation for pl.90, f.14.

***Decoroproetus beecheri* (Ruedemann)**

HYPOTYPE YPM 32986

Edgecombe, G.D., B.D.E. Chatterton, N.E. Vaccari and B.G. Waisfield. 1997. J. Paleont. v.71, n.3, p.431, tf.10.3.

HYPOTYPE YPM 32988

Edgecombe, G.D., B.D.E. Chatterton, N.E. Vaccari and B.G. Waisfield. 1997. J. Paleont. v.71, n.3, p.431, tf.10.4.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Valiant, W.S., 1892.

See also *Cornuproetus beecheri* (Ruedemann).

***Decoroproetus corycoeus* (Conrad)**

See *Proetus corrugatus* Van Ingen.

***Deiphon forbesi* Barrande**

HYPOTYPE YPM 13890

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.121, pl.9, f.8.

=*Deiphon longifrons* Whittard. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.42.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

HYPOTYPE YPM 13891

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.121, pl.9, f.9.

=*Deiphon longifrons* Whittard. Holotype. Whittard, W.F. 1934. Ann. Mag. Nat. Hist. ser.10, v.14, p.520, pl.16, f.9.

=*Deiphon longifrons* Whittard. Holotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.42, pl.10, f.1,2.

HYPOTYPE YPM 13892

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.121.

=*Deiphon longifrons* Whittard. Paratype. Whittard, W.F. 1934. Ann. Mag. Nat. Hist. ser.10, v.14, p.520, pl.16, f.8a,8b.

=*Deiphon longifrons* Whittard. Paratype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.42, pl.10, f.11.

HYPOTYPE YPM 13892A-13892C

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.121.

=*Deiphon longifrons* Whittard. Paratype. Whittard, W.F. 1934. Ann. Mag. Nat. Hist. ser.10, v.14, p.520.

=*Deiphon longifrons* Whittard. Paratype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.42.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Deiphon longifrons* Whittard**

See *Deiphon forbesi* Barrande.



***Delaria antiqua* (Girty)**

HYPOTYPE YPM 26277

Cisne, J.L. 1971. J. Paleont. v.45, n.3, pl.68, f.40.<sup>†</sup>

Early Permian. Cathedral Mountain, Glass Mountains, Texas, USA. Collector: King, R.E., 1925.

<sup>†</sup>Not 26227 as cited in explanation for pl.68, f.40.

***Delaria macclintocki* Cisne**

PARATYPE YPM 26554

Cisne, J.L. 1971. J. Paleont. v.45, n.3, p.530, pl.68, f.27.

Early Permian, Kaibab Limestone. Arizona State College campus, Flagstaff, top of member, facies 3, T 21 N, R 7 E, Museum of Northern Arizona loc. 118, Coconino Co., Arizona, USA.

***Delaria snowi* Cisne**

PARATYPE YPM 26276

Cisne, J.L. 1971. J. Paleont. v.45, n.3, p.531.

Early Permian, Kaibab Limestone. Bright Angel trail, Grand Canyon, facies 2 of member, Arizona, USA. Collector: Noble, ?, 1905.

***Dellea butlerensis* Frederickson**

HYPOTYPE YPM 18421

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.639, pl.91, f.11.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18422

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.639, pl.89, f.1-3.

Late Cambrian, Gatesburg Fm. Aphanitic dark limestone, 12 ft above base of member, Fickus Quarry, 2 mi S of Hartley, 0.25 mi W of asphalt county road between Bedford and Rainsburg, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Dellea saratogensis* (Resser)**

HYPOTYPE YPM 18406

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.638, pl.91, f.12, 14.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina with pinkish intraformational conglomerate, 32 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18408

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.638, pl.91, f.16.

Late Cambrian, Conococheague Limestone. Massive crystalline limestone 106 ft above basal sandy member, 0.5 mi SW of Cushwa Mill, S of branch of Rockdale Creek, S of several farm-houses N of creek, Williamsport Quad., Washington Co., Maryland, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18419

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.638, pl.91, f.15.

Late Cambrian, Gatesburg Fm. Brownish trilobite coquina in pinkish intraformational conglomerate, 36 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18434

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.638, pl.91, f.13.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Dellea suada* (Walcott)**

HYPOTYPE YPM 18402

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.22.

Late Cambrian, Gatesburg Fm. Crystalline limestone, Imler Quarry, 12 ft above lowest

exposed beds of Ore Hill Mbr, just E of township road to E of Evitt's mountain, 2.5 mi S of junction of this road with Bedford-Rainsburg road at Egoff, Colerain Township, Colerain Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18403**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.9,10.

Late Cambrian, Gatesburg Fm. Dark limestone near middle of member, about 25 ft above 45-2w.2, Ore Hill Quarry, quarry 0.25 mi E of crossroads of PA Hwy 686 and road leading E to Ore Hill, S of road, Bloomfield Township, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18410**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.6,8.

**HYPOTYPE YPM 18412A**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.18.<sup>†</sup>

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina with pinkish intraformational conglomerate, 32 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18412B**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.20.<sup>††</sup>

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina with pinkish intraformational conglomerate, 32 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18413**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.22.

Late Cambrian, Gatesburg Fm. Dark aphanitic limestone 72 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18415**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.4,5.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE YPM 18417**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.21.

**HYPOTYPE YPM 18418**

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.636, pl.91, f.26.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

<sup>†</sup>The image is reversed in pl.91, f.18.

<sup>††</sup>The image is reversed in pl.91, f.20.

***Diacalymene altirostris* (Foerste)**

See *Calymene altirostris* Foerste.

***Diacalymene consimilis* (Cooper)**

See *Calymene consimilis* Cooper.

***Diacalymene schucherti* (Twenhofel)**

See *Calymene schucherti* Twenhofel.

***Diatemnus miculus* Raymond**

**HOLOTYPE YPM 14709**

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1092, pl.1, f.19.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Dicranopeltoides? canadensis* (Logan)**

**HYPOTYPE YPM 13355**

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.26, f.3.

**HYPOTYPE YPM 13357**

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.26, f.4.

HYPOTYPE YPM 13358

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.237.

HYPOTYPE YPM 30865

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.237, pl.26, f.1.

HYPOTYPE YPM 30887

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.241, pl.26, f.2.

Early Silurian, Llandoverly, West Point Fm. Along crest of ridge, Reddish Point, Quebec, Canada. Collector: Schuchert, C., 8/1923.

***Dicranopeltoides? logani* Northrop**

SYNTYPE YPM 13361

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.237.

SYNTYPE YPM 30866

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.237, pl.26, f.7.

Early Silurian, Llandoverly, West Point Fm. Along crest of ridge, Reddish Point, Quebec, Canada. Collector: Northrop, S.A., 1927.

***Dicranurus hamatus* (Hall)**

HYPOTYPE YPM 6567

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, pl.35, f.1.

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarkesville, Albany Co., New York, USA. Collector: Beecher, C.E., 1887.

***Dikelocephalus insolitus* Raymond**

HOLOTYPE YPM 4713

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.434, pl.13, f.22.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.176, pl.13, f.22.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Dimeropygiella caudanodosa* Ross**

HOLOTYPE YPM 18217

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.125, pl.35, f.18,23,28.

=*Ischyrotoma caudanodosa*. Whittington, H.B. 1963. Bull. Mus. Comp. Zool. v.129, n.1, p.47.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18218

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.125.

=*Ischyrotoma caudanodosa*. Whittington, H.B. 1963. Bull. Mus. Comp. Zool. v.129, n.1, p.47.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18219

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.125, pl.35, f.22,24,27.

=*Ischyrotoma caudanodosa*. Whittington, H.B. 1963. Bull. Mus. Comp. Zool. v.129, n.1, p.47.

PARATYPE YPM 18220

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.125, pl.35, f.25,26.

=*Ischyrotoma caudanodosa*. Whittington, H.B. 1963. Bull. Mus. Comp. Zool. v.129, n.1, p.47.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18769



Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.637, tf.1 (in part), pl.63, f.24,28-30.

HYPOTYPE YPM 18770

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.637, tf.1 (in part).

HYPOTYPE YPM 18771†

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.637, pl.63, f.25.

Early Ordovician, Garden City Fm, Zone J. 265-350 ft below top of garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1949.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

### ***Dipleura dekayi* Green**

HYPOTYPE YPM 26752†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.79, pl.f.9.

Middle Devonian, Mahantango Fm. Northumberland, Northumberland Co., Pennsylvania, USA.

†This is a replica. The location of the actual specimen has not been determined.

HYPOTYPE YPM 26764†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.79, pl.f.8.

Middle Devonian, Mahantango Fm. Lehigh, Carbon Co., Pennsylvania, USA.

†This is a replica. The location of the actual specimen has not been determined.

HYPOTYPE YPM 35459†, 35461-35463†

Cooper, G.A. 1935. J. Paleont. v.9, n.1, p.3.

Middle Devonian, Hamilton Grp, Skaneateles Shale. Colgate University Campus quarry, Hamilton, Madison Co., New York, USA. Collector: Cooper, G.A.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate these specimens. They are believed to be permanently lost.

### ***Distazeris acuta* Raymond**

HOLOTYPE YPM 14713

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1095, pl.1, f.27,28.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

### ***Distazeris simplex* Raymond**

See *Ucebia simplex* Raymond.

### ***Distazeris spicata* (Raymond)**

See *Acheilus spicatus* Raymond.

### ***Dokimocephalus intermedius* (Resser)**

HYPOTYPE YPM 18489

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.640, pl.90, f.25.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

### ***Dolichoharpes* sp.**

HYPOTYPE YPM 23294

Shaw, F.C. 1968. Mem. New York St. Mus. n.17, p.55, pl.7, f.1.

Middle Ordovician, Crown Point Limestone. Middle to upper part of formation, Sloop Bay, ledges near water in center of bay shore in dark gray, hard limestone with much pyrite, Shaw (1968) loc. V114, Valcour Island, Lake Champlain, Clinton Co., New York, USA.

### ***Dolichometopus vermontensis* Howell**

PARATYPE YPM 13437B

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1192.†

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

†The presence of this species on this slab is doubtful.

### ***Drabiaacroccipita* Wilson**

HOLOTYPE YPM 18452

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.640, pl.94, f.3-5.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina with pinkish intraformational conglomerate, 32 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18451

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.640, pl.94, f.8.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate at top of quarry wall, 58.5 ft above base of Ore Hill Mbr, Flucht-Eschelmann quarries, on and S of county road connecting Lafayetteville with PA Hwy 868, in quarry owned by Snowburger across road from Eschelmann farmhouse, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Drabia curtocippita* Wilson**

**HOLOTYPE** YPM 18592

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.24,25.

Late Cambrian, Conococheague Limestone. Dark medium-bedded oolitic limestone and dolomite, 247 ft above basal sandy member, on low hill 0.5 mi W of Winchester, VA city center, at city limits on US 50 to S of highway and W of old Glen Burnie estate, Frederick Co., Virginia, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18458

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.22,23.

Late Cambrian, Conococheague Limestone. Isolated dark limestone ledge in field, N side of Conococheague Creek, Musser Farm, 200 yd S of PA Hwy 997, eastern limits of Scotland, Chambersburg Quad., Franklin Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18459A

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.27 (lower left cranidium).<sup>†</sup>

**HYPOTYPE** YPM 18459B

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.27 (upper right cranidium).<sup>†</sup>

Late Cambrian, Conococheague Limestone. Dark medium-bedded oolitic limestone and dolomite, 228 ft above basal sandy member, on low hill 0.5 mi W of Winchester, VA city center, at city limits on US 50 to S of highway and W of old Glen Burnie estate, Frederick Co., Virginia, USA. Collector: Wilson, J.L.

<sup>†</sup>Not "YPM 18459b" as suggested on p.641 and in the explanation for pl.94, f.27.

<sup>††</sup>Not "YPM 18459a" as suggested on p.641 and in the explanation for pl.94, f.27.

***Drabia curtocippita* (?) Wilson**

**HYPOTYPE** YPM 18459C

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.27 (pygidium on right).<sup>†</sup>

Late Cambrian, Conococheague Limestone. Dark medium-bedded oolitic limestone and dolomite, 228 ft above basal sandy member, on low hill 0.5 mi W of Winchester, VA city center, at city limits on US 50 to S of highway and W of old Glen Burnie estate, Frederick Co., Virginia, USA. Collector: Wilson, J.L.

<sup>†</sup>Not "YPM 18459a" or "YPM 18459b" as suggested on p.641 and in the explanation for pl.94, f.27.

***Drabia menusa* Wilson**

**HOLOTYPE** YPM 18462

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.6,7.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

**HYPOTYPE** YPM 18463

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.26.

Late Cambrian, Gatesburg Fm. Dark limestone on quarry rim on W side, Ore Hill Quarry, quarry 0.25 mi E of crossroads of PA Hwy 686 and road leading E to Ore Hill, S of road, Bloomfield Township, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Drabia?* sp. undet.**

**HYPOTYPE** YPM 18590

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.641, pl.94, f.1,2.

Late Cambrian, Conococheague Limestone. Dark medium-bedded oolitic limestone and dolomite, 247 ft above basal sandy member, on low hill 0.5 mi W of Winchester, VA city center, at city limits on US 50 to S of highway and W of old Glen Burnie estate, Frederick Co., Virginia, USA. Collector: Wilson, J.L.

***Dunderbergia vermontensis* Raymond**

HOLOTYPE YPM 14742

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1112, pl.3, f.9.

=*Meteoraspis? minuta* (Raymond). Hypotype Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.475.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Sandy limestone at base of conglomerate, 3.5 mi N of St. Albans, 1 mi S of Rockledge, Franklin Co., Vermont, USA. Collector: Schuchert, C., Keith, A. and Prindle, ?.

***Ectenonotus raymondi* Holliday**

PARATYPE YPM 11315

Holiday, Samuel. 1942. J. Paleont. v.16, n.4, p.476.<sup>†</sup>

Middle Ordovician, Table Head Grp. Zone 10 of Logan's section, but may also include Zone 9 and top of 8, mainly lower Table Head, lower Chazy, S from Port au Choix village to lighthouse along gulf north, Point Riche, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 7/31/1910.

See also *Ectenonotus westoni* (Billings).

<sup>†</sup>Labels with specimen refer to Zone 11, but text refers to Zones 8 -10.

***Ectenonotus westoni* (Billings)**

HYPOTYPE YPM 11314

Raymond, P.E. 1920b. Bull. Mus. Comp. Zool. (Harvard Univ.) 64:2, p.295.

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.137.

=*Ectenonotus raymondi* Holiday. Holotype. Holiday, Samuel. 1942. J. Paleont. v.16, n.4, p.476, pl.74, f.4.

Middle Ordovician, Table Head Grp. Zone 10 of Logan's section, but may also include Zone 9 and top of 8, mainly lower Table Head, lower Chazy, S from Port au Choix village to lighthouse along gulf north, Point Riche, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 7/31/1910.

***Eldoradia dunbari* Lochman**

HOLOTYPE YPM 15804

Lochman, C. 1938. J. Paleont. v.12, n.5, p.465, pl.56, f.36-38.

PARATYPE YPM 15805

Lochman, C. 1938. J. Paleont. v.12, n.5, p.465, pl.56, f.39,40.

PARATYPE YPM 15806

Lochman, C. 1938. J. Paleont. v.12, n.5, p.465, pl.56, f.41,42.<sup>†</sup>

PARATYPE YPM 15807-15809, 31336-31339

Lochman, C. 1938. J. Paleont. v.12, n.5, p.465.

Middle Cambrian, March Point Fm. Zone 10, March Point section, to the E along shore, St. George Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O. and Leith, E.I., 1933.

<sup>†</sup>Incorrectly cited as YPM 15805 on pl.56, f.42.

***Eleutherocentrus petersoni* Clarke**

HYPOTYPE YPM 18741

Whittington, H.B. 1953. J. Paleont. v.27, n.5, p.668, ff.5, pl.69, f.5,6.

HYPOTYPE YPM 18742

Whittington, H.B. 1953. J. Paleont. v.27, n.5, p.668, ff.5, pl.69, f.9,10.

HYPOTYPE YPM 18743

Whittington, H.B. 1953. J. Paleont. v.27, n.5, p.668, ff.5, pl.69, f.4.

Middle Ordovician, Swan Peak Fm, Zone M. red quartzite beds that are in the lower part of quartzite unit that is 147-338 ft above base of Swan Peak, base of W-facing cliff, E side of Beaver Creek, and immediately S of Idaho-Utah state line, and 7 mi NW of Garden City, Logan Quad., SE sec35T15NR4E, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.



***Eleutherocentrus williamsi* Ross**

HOLOTYPE YPM 18031

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.70, pl.14, f.18,20,21.

PARATYPE YPM 18032

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.70, pl.14, f.19,22,25.

PARATYPE YPM 18033

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.70, pl.14, f.16,17.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

***Elrathia longa* Howell**

PARATYPE YPM 13423A<sup>†</sup>

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.

PARATYPE YPM 13432B

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.

PARATYPE YPM 13433C<sup>††</sup>

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.<sup>†††</sup>

PARATYPE YPM 13434B

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.<sup>††††</sup>

PARATYPE YPM 13435B

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.

PARATYPE YPM 13436

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.<sup>†††††</sup>

PARATYPE YPM 13437C

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.<sup>††††††</sup>

PARATYPE YPM 13438

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1184.

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

<sup>†</sup>This is a small chip with three individuals present.

<sup>††</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

<sup>†††</sup>Howell (1937) refers to this species, *Elrathia longa* (YPM 13433C), on this slab with *Champlainia rectimargo* (YPM 13433A) and *Conoides edisoni* (YPM 13433B); however, only *Champlainia rectimargo* (YPM 13433A) appears to be present.

<sup>††††</sup>Howell (1937) refers to this species, *Elrathia longa* (YPM 13434B), on this slab with *Conoides edisoni* (YPM 13434A); however, it appears that only *Conoides edisoni* (YPM 13434A) is present.

<sup>†††††</sup>This specimen is not visible.

<sup>††††††</sup>The presence of this species, *Elrathia longa*, on this slab is doubtful.

***Elvinia roemeri* (Shumard)**

HYPOTYPE YPM 18490

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.21.

HYPOTYPE YPM 18491

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.22.

HYPOTYPE YPM 18492

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.20.

HYPOTYPE YPM 18493

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.19.

HYPOTYPE YPM 18496

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.5.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Encrinuroides tuberculosis* (Collie)**See *Encrinurus tuberculosis* Collie.***Encrinurus anticostiensis* Twenhofel**

HOLOTYPE YPM 10395

Twenhofel, W.H. 1928. Mem. Can. Geol.  
Surv. n.154, p.330, pl.59, f.9

Tripp, R.P. 1962. Palaeont. v.5, pt.3, p.473.

=*Encrinurus (Nucleurus) anticostiensis*.Ramskold, Lars. 1986. Palaeontology. v.29,  
pt.3, p.559.=*Nucleurus anticostiensis*. Edgecombe,  
G.D. 1994. J. Paleont. v.68, n.4, p.832.Edgecombe, G.D. and Lars Ramskold.  
1996. Geobios. v.29, pt.2, p.222.Early Silurian, Llandovery, Jupiter Fm. Cliff W of  
Jupiter River, Anticosti Island, Quebec, Canada.  
Collector: Twenhofel, W.H., 1909.

PARATYPE YPM 10396

Twenhofel, W.H. 1928. Mem. Can. Geol.  
Surv. n.154, p.330, pl.59, f.6.=*Encrinurus deomenos* Tripp. Hypotype.

Tripp, R.P. 1962. Palaeont. v.5, pt.3, p.473.

=*Encrinurus (Nucleurus) anticostiensis*.Ramskold, Lars. 1986. Palaeont. v.29,  
pt.3, p.559.=*Nucleurus anticostiensis*. Edgecombe,  
G.D. 1994. J. Paleont. v.68, n.4, p.832.Edgecombe, G.D. and Lars Ramskold.  
1996. Geobios. v.29, pt.2, p.222.

PARATYPE YPM 10397

Twenhofel, W.H. 1928. Mem. Can. Geol.  
Surv. n.154, p.330, pl.59, f.8=*Encrinurus deomenos* Tripp. Hypotype.Tripp, R.P. 1962. Palaeont. v.5, pt.3, p.473,  
pl.68, f.12.=*Encrinurus (Nucleurus) anticostiensis*.Ramskold, Lars. 1986. Palaeont. v.29, pt.3,  
p.559.=*Nucleurus anticostiensis*. Edgecombe,  
G.D. 1994. J. Paleont. v.68, n.4, p.832.Edgecombe, G.D. and Lars Ramskold.  
1996. Geobios. v.29, pt.2, p.222.Early Silurian, Llandovery, Jupiter Fm. East Cliff,  
Anticosti Island, Quebec, Canada. Collector:  
Twenhofel, W.H., 1909.

PARATYPE YPM 10402

Twenhofel, W.H. 1928. Mem. Can. Geol.  
Surv. n.154, p.330, pl.59, f.7.=*Encrinurus deomenos* Tripp. Hypotype.Tripp, R.P. 1962. Palaeont. v.5, pt.3, p.473,  
pl.67, f.13.=*Encrinurus (Nucleurus) anticostiensis*.  
Ramskold, Lars. 1986. Palaeont. v.29,  
pt.3, p.559.=*Nucleurus anticostiensis*. Edgecombe,  
G.D. 1994. J. Paleont. v.68, n.4, p.832.Early Silurian, Llandovery, Jupiter Fm. W of  
Jupiter River, Anticosti Island, Quebec, Canada.  
Collector: Twenhofel, W.H., 1909.Edgecombe, G.D. and Lars Ramskold.  
1996. Geobios. v.29, pt.2, p.222.

PARATYPE YPM 25650

Twenhofel, W.H. 1928. Mem. Can. Geol.  
Surv. n.154, p.330, pl.59, f.10.=*Encrinurus deomenos* Tripp. Holotype. Tripp,  
R.P. 1962. Palaeont. v.5, pt.3, p.473, pl.67, f.12.Early Silurian, Llandovery, Jupiter Fm. Brooks on  
W side of Cape Sand Top, Anticosti Island, Quebec,  
Canada. Collector: Twenhofel, W.H., 8/13/1919.

HYPOTYPE YPM 25640

Shrock, R.R. and W.H. Twenhofel. 1939. J.  
Paleont. v.13, n.3, p.265, pl.30, f.15.

HYPOTYPE YPM 25641

Shrock, R.R. and W.H. Twenhofel. 1939. J.  
Paleont. v.13, n.3, p.265, pl.30, f.21.

HYPOTYPE YPM 25642

Shrock, R.R. and W.H. Twenhofel. 1939. J.  
Paleont. v.13, n.3, p.265, pl.30, f.22.

HYPOTYPE YPM 25643

Shrock, R.R. and W.H. Twenhofel. 1939. J.  
Paleont. v.13, n.3, p.265, pl.30, f.23.

Early Silurian, Pike Arm Fm. Fossiliferous black argillite, Burnt Island in Goldson Arm near New World Island, Newfoundland, Canada. Collector: Twenhofel, W.H., 1936.

***Encrinurus (Nucleurus) anticostiensis*  
Twenhofel**

See *Encrinurus anticostiensis* Twenhofel.

***Encrinurus cf. caplanensis* Northrop**

HYPOTYPE YPM 13350

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.240, pl.26, f.17.

HYPOTYPE YPM 30867

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.240, pl.26, f.17.

Early Silurian, probably Llandovery, Anse Cascon Fm. roadcut just SE of Loc. B0977, Range III, McPherson Road, Marcil, Quebec, Canada. Collector: Northrop, S.A., 1927.

***Encrinurus deomenos* Tripp**

See *Encrinurus anticostiensis* Twenhofel.

***Encrinurus gibber* Dean**

PARATYPE YPM 11316

Dean, W.T. 1979. Bull. Geol. Surv. Can. n.290, p.10, pl.6, f.2.†

=*Frencriuroides gibber*. Lesperance, P.J. and S. Desbiens. 1995. Paleont. Soc. Mem. 42, p.11.

Late Ordovician, Richmondian. Three Rock Pt. to Salmon Cove, Cape St. George, Newfoundland, Canada. Collector: Dunbar, C.O., 1920.

†Cited as "unnumbered specimen in Peabody."

***Encrinurus laurentinus* Twenhofel**

HYPOTYPE YPM 10399

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.328, pl.59, f.5.

=*Celtencrinurus laurentinus*. Evitt, W.R. and R.P. Tripp. 1977. Palaeontogr. Abt.A. bd.157, p.119.

Strusz, D.L. 1980. Palaeontogr. Abt.A. bd.168, p.10.

=*Erratencrinurus (Celtencrinurus) laurentinus*. Lesperance, P.J. and R.P. Tripp. 1985. Can. J. Earth Sci. v.22, p.207.

Owen, A.W. and R.A. Heath. 1989. Norsk Geol. Tids. v.69, p.229.

HYPOTYPE YPM 10400

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.328, pl.59, f.4.

=*Celtencrinurus laurentinus*. Evitt, W.R. and R.P. Tripp. 1977. Palaeontogr. Abt.A. bd.157, p.119.

Strusz, D.L. 1980. Palaeontogr. Abt.A. bd.168, p.10.

=*Erratencrinurus (Celtencrinurus) laurentinus*. Lesperance, P.J. and R.P. Tripp. 1985. Can. J. Earth Sci. v.22, p.207.

Owen, A.W. and R.A. Heath. 1989. Norsk Geol. Tids. v.69, p.229.

Late Ordovician, Ellis Bay Fm. E of Junction Cliff, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Encrinurus perceensis* Cooper**

HOLOTYPE YPM 12905

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.382, pl.5, f.6.

=*Erratencrinurus (Celtencrinurus) perceensis*. Lesperance, P.J. and R.P. Tripp. 1985. Can. J. Earth Sci. v.22, n.2, p.207, tf.5f-h.

PARATYPE YPM 31265

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.382.

=*Erratencrinurus (Celtencrinurus) perceensis*. Hypotype. Lesperance, P.J. and R.P. Tripp. 1985. Can. J. Earth Sci. v.22, n.2, p.207, tf.5i.†

Late Ordovician, Grande Coupe Beds. Near school, Priest's Road, about 2.5 mi NW of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Northrop, S.A. and Schuchert, C., 8/1927.

†Cited as YPM 12905A.



***Encrinurus tuberculosis* Collie**

HOLOTYPE YPM 7471

Collie, G.L. 1903. Bull. Geol. Soc. Am. v.14, p.418, pl.59, f.3.

=*Encrinuroides tuberculosis*. Strusz, D.L. 1980. Palaeontogr. Abt.A. bd.168, p.8.

Middle Ordovician, Trenton Limestone. Horizon A-9 of Collie, lower part of formation, black shaly limestone, Bellefonte, Centre Co., Pennsylvania, USA. Collector: Collie, G.L., 1902.

***Endymionia schucherti* Raymond**

SYNTYPE YPM 13040

Raymond, P.E. 1920b. Bull. Mus. Comp. Zool. (Harvard Univ.) v.64, n.2, p.277.

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.44, pl.2, f.13.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.324, pl.15, f.1,2.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 2, upper Table Head, Normanskill, S base of Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 8/5/1910.

SYNTYPE YPM 23856

Raymond, P.E. 1920b. Bull. Mus. Comp. Zool. (Harvard Univ.) v.64, n.2, p.277.

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.44.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.324.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 2, upper Table Head, Normanskill, S base of Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 8/5/1910.

***Entomaspis clarki* Raymond**

PARATYPE YPM 15042

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1081, pl.4, f.1.

Early Ordovician, Highgate Limestone. Lower part of formation, 15 ft beneath Grandge Fm,

Grandge Farm, 4.5 mi N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C., Raymond, P.E. and McGerrigle, H.W.

***Eoharpes fragilis* Raymond**

SYNTYPE YPM 13036A

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.16, pl.1, f.10.

=*Selenoharpes fragilis*. Lectotype. Whittington, H.B. 1963. Bull. Mus. Comp. Zool. (Harvard Univ.) v.129, n.1, p.35, pl.1, f.18-20.

=*Scotoharpes fragilis*. Norford, B.S. 1973. Bull. Geol. Soc. Can. n.222, p.11.

SYNTYPE YPM 13036B

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.16, pl.1, f.11.

=*Selenoharpes fragilis*. Paralectotype. Whittington, H.B. 1963. Bull. Mus. Comp. Zool. (Harvard Univ.) v.129, n.1, p.35, pl.2, f.1-3.

=*Scotoharpes fragilis*. Norford, B.S. 1973. Bull. Geol. Soc. Can. n.222, p.11.

Middle Ordovician, Cow Head Grp. Large fossiliferous block in the Cow Head Cgl of Stearing Island, near Cow Head, Newfoundland, Canada. Collector: Dunbar, C.O., 8/2/1918.

***Eophacops marklandensis* (McLearn)**

See *Phacops (Portlockia) marklandensis* McLearn.

***Eophacops musheni* (Salter)**

HYPOTYPE YPM 24890

Campbell, K.S.W. 1967. Bull. Okla. Geol. Surv. n.115, p.37, pl.12, f.20.

Early Silurian, Wenlock. Dudley, England, United Kingdom.

***Eophacops newfoundlandensis* Shrock and Twenhofel**

HOLOTYPE YPM 25639

Shrock, R.R. and W.H. Twenhofel. 1939. J. Paleont. v.13, n.3, p.265, pl.30, f.19,20.

PARATYPE YPM 25638

Shrock, R.R. and W.H. Twenhofel. 1939. J. Paleont. v.13, n.3, p.265, pl.30, f.16-18.

PARATYPE YPM 26948

Shrock, R.R. and W.H. Twenhofel. 1939. J. Paleont. v.13, n.3, p.265.

PARATYPE YPM 26949

Shrock, R.R. and W.H. Twenhofel. 1939. J. Paleont. v.13, n.3, p.265.

Silurian, Pike Arm Fm. Black argillite on NW shore of Burnt Island, Goldson Arm, New World Island, Newfoundland, Canada. Collector: Twenhofel, W.H.

***Eophacops orestes* (Billings)**

HYPOTYPE YPM 30868

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.245, pl.26, f.12.

Early Silurian, probably Llandovery, Anse Cascon Fm. roadcut just SE of Loc. B0977, Range III, McPherson Road, Marcil, Quebec, Canada. Collector: Northrop, S.A., 1927.

***Eophacops primaevus* (Clarke)**

See *Portlockia primaeva* (Clarke).

***Erratencrinurus* (*Celtencrinurus*) *laurentinus***

See *Encrinurus laurentinus* Twenhofel.

***Erratencrinurus* (*Celtencrinurus*) *perceensis***

See *Encrinurus perceensis* Cooper.

***Eshelmania convexa* Wilson**

HOLOTYPE YPM 18488

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.7,8.

Late Cambrian, Conococheague Limestone. Between 49 and 69 ft above basal sandy member, 0.5 mi SW of Cushwa Mill, S of branch of Rockdale Creek, S of several farmhouses N of creek, Williamsport Quad., Washington Co., Maryland, USA. Collector: Wilson, J.L.

***Eshelmania snobergensis* Wilson**

HOLOTYPE YPM 18532A

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.11-12.

Late Cambrian, Gatesburg Fm. Dark massive, crystalline limestone, 11 ft above base of Ore Hill

Mbr, Flucht-Eschelmann quarries, on and S of county road connecting Lafayetteville with PA Hwy 868, in quarry owned by Snowburger across road from Eschelmann farmhouse, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18485

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.15.

Late Cambrian, Conococheague Limestone. Dark medium-bedded oolitic limestone and dolomite, 228 ft above basal sandy member, on low hill 0.5 mi W of Winchester, VA city center, at city limits on US 50 to S of highway and W of old Glen Burnie estate, Frederick Co., Virginia, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18486

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.10.

HYPOTYPE YPM 18487

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.13,14.

HYPOTYPE YPM 18532B

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.642, pl.92, f.9.

Late Cambrian, Gatesburg Fm. Dark massive, crystalline limestone, 11 ft above base of Ore Hill Mbr, Flucht-Eschelmann quarries, on and S of county road connecting Lafayetteville with PA Hwy 868, in quarry owned by Snowburger across road from Eschelmann farmhouse, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Forillonaria dunbari* (Delo)**

See *Odontochile dunbari* Delo.

***Forteyops sexapugia* (Ross)**

See *Kawina sexapugia* Ross.

***Fragscutum glebale* Campbell**

HYPOTYPE YPM 16271

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.965, tf.4.1-3,4,6.

HYPOTYPE YPM 16272

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.965, tf.4.4,4.5,4.7.

Late Silurian, Ludlow, Brownsport Fm. Near Decaturville, Decatur Co., Tennessee, USA.

HYPOTYPE YPM 29265

Edgecombe, G.D. 1990. J. Paleont. v.64, n.6, p.965.

Late Silurian, Ludlow, Brownsport Fm. Coquina limestone, 42 ft above lemon-yellow limestone (probably Dixon-Brownsport contact), 14 ft below Brownsport-Decatur contact, E of Sewell's Spring and Whiteoak School road, 0.3 mi N of Whiteoak School, Clifton, TN 7.5 Quad, Perry Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942

***Fragiscutum glebalis* Campbell**

HOLOTYPE YPM 24881

Campbell, K.S.W. 1967. Bull. Okla. Geol. Surv. n.115, p.21, pl.8, f.7-9, pl.17., f.14.

Late Silurian, Ludlow, Hunton Grp, Henryhouse Limestone. Barren slope 100 ft NE of B4157, Cedar Bluff sec., Arbuckle Mountains, NW corner NE1/4sec09,T02N,R06E, Pontotoc Co., Oklahoma, USA. Collector: Reeds, C.A., 1905.

***Frencrinuroides gibber* (Dean)**

See *Encrinurus gibber* Dean.

***Galbagnostus galba* (Billings)**

See *Arthrorhachis longicollis* Raymond.

***Geragnostus longicollis***

See *Arthrorhachis longicollis* Raymond.

***Gerastos cuvieri* (Steininger)**

HYPOTYPE YPM 2549

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.24, tf.7.10-12.

HYPOTYPE YPM 33844

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.24.

Devonian. Eifel, Germany.

***Gerastos laevigatus* (Barrande)**

HYPOTYPE YPM 6639

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, Tf.8.4-6.

Middle Devonian, Eifel Limestone. Pelm, Eifel, Germany. Collector: Clarke, J.M.

***Gignopeltis rara* (Billings)**

HYPOTYPE YPM 4730

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.454.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.194.

Early Ordovician, Georgia Slate. Lower part of formation, loc. 5, 4.5 mi N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Glaphurus decipiens* Raymond**

HOLOTYPE YPM 13059

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.130, pl.8, f.20.

HYPOTYPE YPM 13057A, 13057B

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.130.

HYPOTYPE YPM 13057C

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.130.

Shaw, F.C. 1968. Mem. New York St. Mus. n.17, pl.9, f.4.

Ordovician, Mingan Fm. Twenhofel Zone A5, Bald Island, Mingan Islands, Quebec, Canada. Collector: Twenhofel, W.H.

***Glyptambon amsdeni* Edgecombe**

HOLOTYPE YPM 29262

Edgecombe, G.D. 1991. J. Paleont. v.65, n.2, p.296, tf.1.11,1.15.

Late Silurian, Ludlow, Brownsport Fm. Green shale at roadside, approx. 50-60 ft above poorly exposed Dixon-Brownsport contact, N side of TN Hwy 114, 2.25 mi SE of Bath Springs Church, Bath Springs 7.5 Quad., Decatur Co., Tennessee, USA. Collector: Amsden, T.W. and C.O. Dunbar, 6/1942

PARATYPE YPM 29260

Edgecombe, G.D. 1991. J. Paleont. v.65, n.2, p.296, tf.1.1,1.5,1.8,1.9.

Late Silurian, Ludlow, Brownsport Fm. Blue Mound Glade, 45 ft above Dixon-Brownsport contact, 0.2 mi N of road leading from Cedar Grove Church to Mount Carmel Church, 0.8 mi NE of Cedar Grove Church, Perryville 7.5 Quad.,



Decatur Co., Tennessee, USA. Collector:  
Amsden, T.W. and C.O. Dunbar, 6/1942.

PARATYPE YPM 29263

Edgecombe, G.D. 1991. J. Paleont. v.65,  
n.2, p.296, tf.1.6,1.7,1.10.

Late Silurian, Ludlow, Brownsport Fm. 60-85 ft  
above section base (Dixon-Brownsport- Decatur  
contacts unexposed), 0.3 mi N of TN Hwy 114, 1  
mi NE of Bath Springs Church, Bath Springs 7.5  
Quad., Decatur Co., Tennessee, USA. Collector:  
Amsden, T.W., 9/1946.

PARATYPE YPM 29266

Edgecombe, G.D. 1991. J. Paleont. v.65,  
n.2, p.296, tf.1.2.

Late Silurian, Ludlow, Brownsport Fm. Green  
shale at roadside, approx. 50-60 ft above poorly  
exposed Dixon-Brownsport contact, N side of TN  
Hwy 114, 2.25 mi SE of Bath Springs Church, Bath  
Springs 7.5 Quad., Decatur Co., Tennessee, USA.  
Collector: Amsden, T.W. and C.O. Dunbar, 6/1942.

### ***Goldius ekwanensis* (Whiteaves)**

HYPOTYPE YPM 14886

Northrop, S.A. 1939. Spec. Pap. Geol. Soc.  
Am. n.21, p.230, pl.25, f.10

Early Silurian, Llandovery, Clemville Fm. Stream  
drift, upstream from Loc. B0993, W fork, from  
forks to upper limit of Range XIII, Middle Branch,  
Port Daniel River, Quebec, Canada. Collector:  
Northrop, S.A., 1927.

### ***Goldius infrequens* Thomas**

HOLOTYPE YPM 26124

Thomas, N.L. 1929a. Bull. Denison Univ.  
Sci. Lab. v.24, p.8, pl.1, f.10.

Early Silurian, Wenlock, St. Clair Fm. Hills between  
Penters Bluff [Izzard Co.] and St. Clair Spring  
[Independence Co.], N of Batesville, Independence  
Co., Arkansas, USA. Collector: Thomas, N.L.

### ***Goldius pompilius* (Billings)**

HYPOTYPE YPM 13352

Northrop, S.A. 1939. Spec. Pap. Geol. Soc.  
Am. n.21, p.231, pl.25, f.4.

= *Scutellum pompilius*. Imlay, R.W. 1967.  
U.S. Geological Survey Professional Paper  
n.540, p.530.

HYPOTYPE YPM 13353

Northrop, S.A. 1939. Spec. Pap. Geol. Soc.  
Am. n.21, p.231, pl.25, f.2,3.

Early Silurian, Llandovery, West Point Fm. Lower  
pink limestone, Reddish Point W of Gascons,  
Quebec, Canada. Collector: Schuchert, C., 8/1923.

### ***Goniophrys prima* Ross**

HOLOTYPE YPM 18075

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.81, pl.18, f.9,15,17.

Lee, D.C. and B.D.E. Chatterton. 1997. J.  
Paleont. v.71, n.3, p.438.

PARATYPE YPM 18073

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.81, pl.18, f.27.

Lee, D.C. and B.D.E. Chatterton. 1997. J.  
Paleont. v.71, n.3, p.438.

PARATYPE YPM 18074

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.81, pl.18, f.18.

Lee, D.C. and B.D.E. Chatterton. 1997. J.  
Paleont. v.71, n.3, p.438.

PARATYPE YPM 18076

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.81, pl.18, f.19,20,22.

Lee, D.C. and B.D.E. Chatterton. 1997. J.  
Paleont. v.71, n.3, p.438.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured section  
up from base of Garden City southward along ridge  
top on W side of Hillyard's Canyon, Bear River  
Range, and about 11 mi E of Preston, Preston  
Quad., W sec23T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### ***Goniotelina williamsi* (Ross)**

HYPOTYPE YPM 18744

Ross, R.J., Jr. 1953b. J. Paleont. v.27, n.5,  
p.666, pl.68, f.14,21.<sup>†</sup>

HYPOTYPE YPM 18745

Ross, R.J., Jr. 1953b. J. Paleont. v.27, n.5,  
p.666, pl.68, f.15.<sup>†</sup>

HYPOTYPE YPM 18746

Ross, R.J., Jr. 1953b. *J. Paleont.* v.27, n.5, p.666.<sup>†</sup>

HYPOTYPE YPM 18747

Ross, R.J., Jr. 1953b. *J. Paleont.* v.27, n.5, p.666, pl.68, f.11,13.<sup>†</sup>

HYPOTYPE YPM 18748

Ross, R.J., Jr. 1953b. *J. Paleont.* v.27, n.5, p.666, pl.68, f.16,17.<sup>†</sup>

HYPOTYPE YPM 18749

Ross, R.J., Jr. 1953b. *J. Paleont.* v.27, n.5, p.666, pl.68, f.19,20.<sup>†</sup>

Early Ordovician, Garden City Fm, Zone J. 265-350 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1949.

HYPOTYPE YPM 18750

Ross, R.J., Jr. 1953 *J. Paleont.* v.27, n.5, p.666, pl.68, f.18.<sup>†</sup>

Early Ordovician, Garden City Fm, Zone J. 265-350 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1949.

<sup>†</sup>Cited as paratypes but not listed as such in the original description.

### ***Goniotelus marionensis* Cullison**

PARATYPE YPM 17420

Cullison, J.S. 1944. *Bull. Tech. Ser. Missouri Univ. Sch. Mines Met.* v.15, n.2, p.83.<sup>†</sup>

Early Ordovician, Cotter Fm. Porous, drusy, red to brown chert, lower Cotter, road down to ferry and fishing camp, elevation approx. 500 ft; E1/2NW1/4sec31,T19N,R14W. Baxter Co., Arkansas, USA. Collector: Cullison, J.S.

PARATYPE YPM 17421

Cullison, J.S. 1944. *Bull. Tech. Ser. Missouri Univ. Sch. Mines Met.* v.15, n.2, p.83.<sup>†</sup>

Early Ordovician, Powell Fm. Marion Co., Arkansas, USA. Collector: Cullison, J.S.

<sup>†</sup>Not 17194 as published on p.84.

### ***Goniotelus semicircularis* Cullison**

HOLOTYPE YPM 17407

Cullison, J.S. 1944. *Bull. Tech. Ser. Missouri Univ. Sch. Mines Met.* v.15, n.2, p.84, pl.35, f.25,26.<sup>†</sup>

Early Ordovician, Cotter Fm. Drusy, red, porous, residual chert, lower Cotter, just W of approach to bridge over White River on US Hwy 62; SE corner sec02,T19N,R15W, Marion Co., Arkansas, USA. Collector: Cullison, J.S.

<sup>†</sup>Not 17182 as published on p.80 and in the explanation for pl.35, f.25,26.

### ***Goniotelus?* sp.**

HYPOTYPE YPM 18328

Ross, R.J., Jr. 1951a. *Bull. Peabody Mus. Nat. Hist.* n.6, pl.15, f.12.

Early Ordovician, Garden City Fm, Zone I. 219-228 ft below top of Garden City, along measured section, SW side of Fish Haven Creek, 4.35 mi (by lumber road) W of Fish Haven, Montpelier Quad., NW SW sec34T13NR3E, Bear Lake Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Grandagnostus vermontensis* Howell**

PARATYPE YPM 13410

Howell, B.F. 1935. *J. Paleont.* v.9, n.3, p.221.

Howell, B.F. 1937. *Bull. Geol. Soc. Am.* v.48, n.8, p.1166.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13411<sup>†</sup>

Howell, B.F. 1935. *J. Paleont.* v.9, n.3, p.221.

Howell, B.F. 1937. *Bull. Geol. Soc. Am.* v.48, n.8, p.1166.

Middle Cambrian, St. Albans Shale. Shale that outcrops N and S of St. Albans, Franklin Co., Vermont, USA.

PARATYPE YPM 13412A

Howell, B.F. 1935. *J. Paleont.* v.9, n.3, p.221.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1166.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13422

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.221.††

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1166.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

HYPOTYPE YPM 13409

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.221.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1166.†††

Middle Cambrian, St. Albans Slate. 0.125 mi SW of Rockledge, N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

††Not 1422 as stated on p.221.

†††Incorrectly cited as paratype on p.1167.

***Greenops barberi* Lieberman and Kloc or *Greenops grabau* Lieberman and Kloc**

HYPOTYPE YPM 33778

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.93,98, tf.9.3,9.6.

HYPOTYPE YPM 33786, 33855, 33856

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.93,98.

HYPOTYPE YPM 33788

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.93,98, tf.9.4.

Middle Devonian, Hamilton Grp., Moscow Shale or Ludlowville Fm., Wondom, Shale. New York, USA.

***Greenops boothi* (Green)**

NEOTYPE YPM 35807

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.82, tf.23.

Middle Devonian, Givetian, Mahantango Fm, Frame Shale Mbr. Road cut along W side of PA Rte. 26 [Standing Stone Road], about 600 ft NE of intersection of Church Street and 2nd Street, and below Riverview Cemetery, across from Armory, E side of Huntington, Huntingdon Co., Pennsylvania, USA. Collector: Kloc, G.

***Greenops boothi?* (Green)**

HYPOTYPE YPM 35742

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.93.

***Greenops grabau* Lieberman and Kloc**

HYPOTYPE YPM 6603, 6665, 33764, 33787, 33857, 33858, 35740

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.93.

HYPOTYPE YPM 33783, 33784

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.93, tf.10.3.

HYPOTYPE YPM 33875

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.93, tf.10.1,10.2.

Middle Devonian, Givetian, Hamilton Grp, Ludlowville Fm. New York, USA.

***Greenops widerensis* Lieberman and Kloc**

HYPOTYPE YPM 7039, 35738, 35739

Lieberman, B.S. and G.J. Kloc. 1997. Bull. Am. Mus. Nat. Hist. v.232, p.101.

Middle Devonian, Givetian, Hamilton Grp, Widder Fm. Hungry Hollow, Arkona, Ontario, Canada.

***Hadrohybus dunbari* Raymond**

HOLOTYPE YPM 13031

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.147, pl.9, f.5,6.

=*Bolbocephalus (Hadrohybus) dunbari*. Fortey, R.A. 1988. Postilla n.202, p.3, tf.1a-c.

PARATYPE YPM 13030

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.147.



=*Bolbocephalus (Hadrohybus) dunbari*.

Fortey, R.A. 1988. Postilla n.202, p.3, tf.1d-e.

Middle Ordovician, Cow Head Grp. Large fossiliferous block in the Cow Head Cgl of Stearing Island, near Cow Head, Newfoundland, Canada. Collector: Dunbar, C.O., 8/2/1918.

***Harpidella spinulocervix (Foerste)***

See *Cyphaspis spinulocervix* Foerste.

***Harpina antiquatus (Billings)***

HYPOTYPE YPM 7397

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.330, pl.10, f.1.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.214, pl.32, f.1.

Middle Ordovician. Sloop Bay, Valcour Island, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

***Hastagnostus angustus Howell***

PARATYPE YPM 13414

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1165, pl.3, f.3.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13415†

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1165.††

Middle Cambrian, St. Albans Shale. Shale that outcrops N and S of St. Albans, Franklin Co., Vermont, USA.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

††No locality information is available in the Peabody ledgers or in Howell (1937) for this specimen.

***Heliomera sol (Billings)***

HYPOTYPE YPM 23326

Raymond, P.E. 1905b. Am. J. Sci. ser.4, v.20, n.119, p.381.

Raymond, P.E. 1910a. Ann. Carnegie Mus. v.7, n.1, p.77, pl.18, f.12.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.245, pl.38, f.12.

=*Heliomera* sp. Evitt, W.R. 1951. Journal of Paleontology. v.25, n.5, p.603.

=*Heliomeroides akocephala* Shaw. Holotype. Shaw, F.C. 1968. Mem. New York St. Mus. n.17, p.69, pl.4., f.14,22.

Middle Ordovician, Chazy Grp. Chazy, Clinton Co., New York, USA.

***Heliomera* sp.**

See *Heliomera sol* (Billings).

***Heliomeroides akocephala* Shaw**

See *Heliomera sol* (Billings).

***Hemigyraspis* sp. ind.**

HYPOTYPE YPM 4701

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.429.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.172.

Early Ordovician, Highgate Limestone. 2 mi N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Hemirhodon juvenis* Raymond**

See *Corynexochus juvenis* Raymond.

***Hemirhodon minor* Raymond**

HOLOTYPE YPM 14731

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1105, pl.2, f.14.

=*Hemirhodon schucherti* Raymond.

Hypotype. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

PARATYPE YPM 14732

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1105.

=*Hemirhodon schucherti* Raymond.

Hypotype. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

***Hemirhodon schucherti* Raymond**

HOLOTYPE YPM 14725

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1104, pl.2, f.13.

Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

PARATYPE YPM 14726

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1104, pl.2, f.12.

Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

PARATYPE YPM 14727

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1104.

Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

Late Cambrian, Sweetsburg Fm, Hungerford Slate Mbr. Most westerly of 3 small limestone lentils in upper part of Hunton, NW of Georgia Center, Franklin Co., Vermont, USA. Collector: Schuchert, C., Keith, A. and Clark, T.H.

See also *Hemirhodon minor* Raymond and *Hemirhodon viator* Raymond.

***Hemirhodon viator* Raymond**

HOLOTYPE YPM 14728

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1105, pl.2, f.9.

=*Hemirhodon schucherti* Raymond.

Hypotype. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

PARATYPE YPM 14729

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1105, pl.2, f.10.

=*Hemirhodon schucherti* Raymond.

Hypotype. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

PARATYPE YPM 14730

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1105, pl.2, f.11.

=*Hemirhodon schucherti* Raymond.

Hypotype. Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.282.

Late Cambrian, Sweetsburg Fm, Hungerford Slate Mbr. Most westerly of three small limestone lentils in upper part of Hunton, NW of Georgia Center, Franklin Co., Vermont, USA. Collector: Schuchert, C., Keith, A. and Clark, T.H.

***Heterocaryon platystigma* Raymond**

HOLOTYPE YPM 14748

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1119, pl.3, f.13.

Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1016.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.48, pl.36, f.6,7.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Hibertia valcourensensis* Shaw**

HYPOTYPE YPM 23295

Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.53, pl.6, f.19.

HYPOTYPE YPM 25665

Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.53, pl.6, f.20.

Middle Ordovician. Chazy, R1 of Shaw, 1968, which is type section of Chazy, 1.1 mi SW of Little Chazy River Bridge at Chazy village, low ridge on SW side of intersection of Interstate 87 and Duprey Road, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

***Highgatea bisinuata* Raymond**

HOLOTYPE YPM 14706A

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1088, pl.1, f.13.

=*Loganellus laeviuscula* (Raymond).

Hypotype. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.17, pl.6, f.2.

PARATYPE YPM 14706B

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1106, pl.1, f.14.

=*Keithiella raymondi* Rasetti. Holotype. Rasetti, Franco. 1946a. J. Paleont. v.20, n.5, p.541, pl.1, f.22.

=*Keithiella? raymondi* Rasetti. Holotype.  
Clark, M.G. and A.B. Shaw. 1968. J.  
Paleont. v.42, n.4, p.1024.

=*Keithia schucherti* Raymond. Hypotype.  
Ludvigsen, Rolf and S.R. Westrop. 1989.  
Paleont. Can. n.6, p.30, pl.6, f.5.†

Late Cambrian, Gorge Fm. Lowest zone in  
formation, Highgate Falls, Franklin Co., Vermont,  
USA. Collector: Schuchert, C.

†Referred to on p.30 as *Kiethia schucherti* but  
figured on pl.6, f.5 as *Loganellus laeviusculus*.

### ***Highgatea laeviuscula* Raymond**

HOLOTYPE YPM 14705A

Raymond, P.E. 1937. Bull. Geol. Soc. Am.  
v.48, p.1087, pl.1, f.10,11.

=*Loganellus laeviuscula*. Ludvigsen, Rolf  
and S.R. Westrop. 1989. Paleont. Can. n.6,  
p.17, pl.6, f.1.

PARATYPE YPM 14705B

Raymond, P.E. 1937. Bull. Geol. Soc. Am.  
v.48, p.1087, pl.1, f.12.

=*Loganellus laeviuscula*. Ludvigsen, Rolf  
and S.R. Westrop. 1989. Paleont. Can. n.6,  
p.17, pl.6, f.4.

Late Cambrian, Gorge Fm. Lowest zone in  
formation, Highgate Falls, Franklin Co., Vermont,  
USA. Collector: Schuchert, C.

### ***Hillyardina semicylindrica* Ross**

HOLOTYPE YPM 18035

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.71, pl.16, f.3,4,9.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured section  
up from base of Garden City southward along ridge  
top on W side of Hillyard's Canyon, Bear River  
Range, and about 11 mi E of Preston, Preston  
Quad., W sec23T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1946 to 1947.

PARATYPE YPM 18034

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.71, pl.16, f.1.

PARATYPE YPM 18036

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.71, pl.16, f.5-7.

PARATYPE YPM 18037

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.71, pl.16, f.2,8.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured section  
up from base of Garden City southward along ridge  
top on W side of Hillyard's Canyon, Bear River  
Range, and about 11 mi E of Preston, Preston  
Quad., W sec23T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### ***Hintzeia celsaora* (Ross)**

See *Protopliomerops celsaora* Ross.

### ***Homalonotus dawsoni* Hall**

HYPOTYPE YPM 292

McLearn, F.H. 1924. Mem. Can. Geol. Surv.  
n.118, p.164, pl.26, f.14,15.†

HYPOTYPE YPM 298

McLearn, F.H. 1924. Mem. Can. Geol. Surv.  
n.118, p.164, pl.27, f.11,12.††

HYPOTYPE YPM 299

McLearn, F.H. 1924. Mem. Can. Geol. Surv.  
n.118, p.164, pl.27, f.13-15.†††

HYPOTYPE YPM 300

McLearn, F.H. 1924. Mem. Can. Geol. Surv.  
n.118, p.164, pl.27, f.16.††††

Early Devonian, Stonehouse Fm. Trilobite bed at  
top of section, Zone C of McLearn, along shore,  
just NE of Stonehouse Brook, 2.4 mi SW of  
Arisaig Point, Arisaig, Antigonish Co., Nova  
Scotia, Canada. Collector: Twenhofel, W.H., 1908.

†Incorrectly cited as [YPM] 471.

††Incorrectly cited as [YPM] 474.

†††Incorrectly cited as [YPM] 474a.

††††Incorrectly cited as [YPM] 474b.

### ***Homalonotus (Brongniartella)* *trentonensis***

See *Brongniartella trentonensis* (Simpson).

### ***Homodictya imitatrix* Raymond**

HOLOTYPE YPM 14745



Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1114, pl.3, f.7.

=*Blountia (Homodictya) imitatrix*. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.473, pl.57, f.28.

PARATYPE YPM 14746

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1114, pl.3, f.8.

=*Coosia?* sp. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.478, pl.57, f.38.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. In limestone pebble, 4.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Prindle, ?.

### ***Homotelus catactus* Raymond**

HOLOTYPE YPM 13037

Raymond, P.E. 1920b. Bull. Mus. Comp. Zool. (Harvard Univ.) 64:2, p.291.

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.92, pl.5, f.5.

Cow Head Grp. Large fossiliferous block in the Cow Head Cgl of Stearing Island, near Cow Head, Newfoundland, Canada. Collector: Dunbar, C.O., 8/2/1918.

### ***Housia vacuna* (Walcott)**

HYPOTYPE YPM 18424

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.643, pl.93, f.13.

Late Cambrian, Gatesburg Fm. Dark crystalline limestone, 36 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18426

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.643, pl.93, f.5.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 68 ft above base of member, dolomite ledges in wheat field S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18427

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.643, pl.93, f.8.

HYPOTYPE YPM 18428

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.643, pl.93, f.6,7.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18429

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.643, pl.93, f.12.

HYPOTYPE YPM 18430

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.643, pl.93, f.11.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 68 ft above base of member, dolomite ledges in wheat field S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

### ***Hundwarella memor* (Reed)**

HYPOTYPE YPM 32993

Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.74, pl.21, f.3.

Middle Cambrian. Green phyllitic shale with ferruginous patches, along road between Turkapur and bend of the Talar River, Talar Valley, 5 mi from Handawara (Handawor) on road to Zachaldor, NW part of Vale of Kashmir, Kashmir, India. Collector: de Terra, H., 1932.

See also *Anomocare memor* (Reed).

### ***Hungaia minuta* Raymond**

HOLOTYPE YPM 4740

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.443, pl.14, f.1.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.183, 184, pl.14, f.1.

=*Protopatokephalus minutus*. Raymond,  
P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1086.

=*Apatokephaloides clivosus* Raymond.  
Hypotype. Ludvigsen, Rolf and S.R. Westrop.  
1989. Paleont. Can. n.6, p.41, pl.29, f.5.

Late Cambrian, Gorge Fm. Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C. and Dunbar, C.O., 1923.

### ***Hyperbolochilus marginauctum* Ross**

HOLOTYPE YPM 18057

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.77, pl.17, f.27,34,35.

PARATYPE YPM 18058

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.77, pl.17, f.26,30,31.

PARATYPE YPM 18059

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.77, pl.17, f.24,25.

PARATYPE YPM 18060

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.77.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured section  
up from base of Garden City southward along ridge  
top on W side of Hillyard's Canyon, Bear River  
Range, and about 11 mi E of Preston, Preston  
Quad., W sec23T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### ***Hypothetica rawi* Ross**

HOLOTYPE YPM 18183

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.113, pl.28, f.11.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured section  
up from base of Garden City southward along ridge  
top on W side of Hillyard's Canyon, Bear River  
Range, and about 11 mi E of Preston, Preston  
Quad., W sec23T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### ***Hysteropleura macgerriglei* Raymond**

HOLOTYPE YPM 14761

Raymond, P.E. 1937. Bull. Geol. Soc. Am.  
v.48, p.1094, pl.1, f.22.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl  
Mbr. Found near limestone lentils of Hungerford  
Shale, NW of Georgia Center, loose block,  
Franklin Co., Vermont, USA. Collector:  
McGerrigle, H.W.

### ***Hysteropleura schucherti* (Raymond)**

See *Antagmus schucherti* Raymond and  
*Apedopyanus parkeri* Raymond.

### ***Hystricurus abruptus* Cullison**

PARATYPE YPM 17401

Cullison, J.S. 1944. Bull. Tech. Ser.  
Missouri Univ. Sch. Mines Met. v.15, n.2,  
p.80, pl.34, f.46.†

Early Ordovician, Jefferson City Grp, Rich  
Fountain Fm. Residual chert nodules, elevation  
1020 ft, Rolla quadrangle, E1/2E1/2SW1/  
4sec03,T37N,R08W, Phelps Co., Missouri, USA.  
Collector: Polhemus, J.

†Not 17176 as published on p.80 and in the  
explanation for pl.34, f.46.

### ***Hystricurus acumennasus* Ross**

HOLOTYPE YPM 17980

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.50, pl.11, f.6,7,11.

PARATYPE YPM 17981

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.50, pl.11, f.15.

PARATYPE YPM 17982

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.50, pl.11, f.10,12.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured section  
up from base of Garden City southward along ridge  
top on W side of Hillyard's Canyon, Bear River  
Range, and about 11 mi E of Preston, Preston  
Quad., W sec23T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### ***Hystricurus acumennasus?* Ross**

HYPOTYPE YPM 17983

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.50, pl.11, f.17,18.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured section  
up from base of Garden City southward along ridge

top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Hystricurus contractus* Ross**

HOLOTYPE YPM 17962

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.10, f.4,6,7.

PARATYPE YPM 17963

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.10, f.10.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Hystricurus flectimembrus* Ross**

HOLOTYPE YPM 17972

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.10, f.29-31.

PARATYPE YPM 17970

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.10, f.33.

PARATYPE YPM 17971

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.10, f.26.

PARATYPE YPM 17973

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.10, f.25,32.

PARATYPE YPM 17974

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.11, f.20,22,23.

PARATYPE YPM 17975

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.11, f.21,25,26.

PARATYPE YPM 17976

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.11, f.28,30,31.

PARATYPE YPM 17977

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.11, f.27,29,32.

PARATYPE YPM 17978

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.11, f.16.

PARATYPE YPM 17979

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.11, f.24.

PARATYPE YPM 18300

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.48, pl.11, f.33.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Hystricurus genalatus* Ross**

HOLOTYPE YPM 17926

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.40, pl.8, f.1,2,5.

Early Ordovician, Garden City Fm, Zone B. Float, 98-118 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 17928

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.40, pl.8, f.3,4,6.

PARATYPE YPM 17929

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.40, pl.8, f.11.

PARATYPE YPM 17930

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.40, pl.8, f.8.

PARATYPE YPM 17931

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.40, pl.8, f.9,12,13.



PARATYPE YPM 17932

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.40, pl.8, f.7.

PARATYPE YPM 17933

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.40, pl.8, f.10.

Early Ordovician, Garden City Fm, Zone B. Float,  
98-118 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Hystricurus genalatus* Ross, *Hystricurus*  
*paragenalatus* Ross or *Hystricurus*  
*politus* Ross**

HYPOTYPE YPM 17941

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.9, f.1.

HYPOTYPE YPM 17942-17947

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.40, pl.9, f.2,7.

HYPOTYPE YPM 17948

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.40, pl.9, f.13,19.

Early Ordovician, Garden City Fm, Zone B. Float,  
98-118 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Hystricurus mammatus* Raymond**

HOLOTYPE YPM 4755

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.407, pl.12, f.17.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.153, pl.12, f.17.

Early Ordovician, Georgia Slate. Lower part of  
formation, loc. 5, 4.5 mi N of Highgate Center,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C. and Dunbar, C.O., 1923.

***Hystricurus oculilunatus* Ross**

HOLOTYPE YPM 17960

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.47, pl.10, f.2,3,5.

PARATYPE YPM 17961

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.47, pl.10, f.1.

HYPOTYPE YPM 18299

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.47, pl.10, f.8,9,12.

Early Ordovician, Garden City Fm, Zone F. 130 ft  
above base of Garden City, measured section  
southward up from base of Garden City, W side  
of Davenport Hollow, and 5.5 mi due N of Monte  
Cristo Ranger Station, and about 17 mi ESE of  
Paradise, Logan Quad., N sec15T9NR1W, Cache  
Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

***Hystricurus paragenalatus* Ross**

HOLOTYPE YPM 17934

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.8, f.14,17,18.

PARATYPE YPM 17935

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.8, f.24-26.

PARATYPE YPM 17936

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.8, f.23.

PARATYPE YPM 17937

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.8, f.15,16,21.

PARATYPE YPM 17938

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.8, f.20.

PARATYPE YPM 17939

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.8, f.19.

PARATYPE YPM 17940

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.42, pl.8, f.22.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***Hystricurus politus* Ross**

HOLOTYPE YPM 17955

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.45, pl.15, f.3,4,6.

PARATYPE YPM 17954

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.45, pl.9, f.28.

PARATYPE YPM 17956

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.45, pl.15, f.1,2,5.

PARATYPE YPM 17957

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.45, pl.15, f.7-9.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

PARATYPE YPM 17958

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.45, pl.9, f.27,32,33.

PARATYPE YPM 17959

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.45, pl.9, f.23,24.

Early Ordovician, Garden City Fm, Zone B. Float, 98-118 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Hystricurus politus?* Ross**

HYPOTYPE YPM 17949

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.45, pl.9, f.14.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***Hystricurus robustus* Ross**

HOLOTYPE YPM 17964

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.51, pl.10, f.13,16,20.

PARATYPE YPM 17965

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.51, pl.10, f.11,14,15.

PARATYPE YPM 18030

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.51, pl.14, f.27.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Hystricurus* sp.**

HYPOTYPE YPM 17950

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.46, pl.9, f.15,16.

HYPOTYPE YPM 17951

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.46, pl.9, f.20.

HYPOTYPE YPM 17952

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.46, pl.9, f.21,22,26.

HYPOTYPE YPM 17953

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.46, pl.9, f.25,29,30.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

HYPOTYPE YPM 18208

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.30, f.4,5.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### ***Hystericurus* sp. A**

HYPOTYPE YPM 18296

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.53, pl.9, f.31,34,37.

Early Ordovician, Garden City Fm, probably Zone E. 185 ft above base of Garden City, measured section southward up from base of Garden City, W side of Davenport Hollow, and 5.5 mi due N of Monte Cristo Ranger Station, and about 17 mi ESE of Paradise, Logan Quad., N sec15T9NR1W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

### ***Hystericurus* sp. B**

HYPOTYPE YPM 17967

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.53, pl.10, f.18,19,23.

HYPOTYPE YPM 17969

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.53, pl.10, f.24,27,28.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden

City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Hystericurus?* sp. C**

HYPOTYPE YPM 17966

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.54, pl.10, f.17,21,22.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Hystericurus* sp. D**

PARATYPE YPM 18297

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.54, pl.9, f.35,38,39.

HYPOTYPE YPM 18298

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.54, pl.9, f.36,40,41.

HYPOTYPE YPM 18334

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.54, pl.30, f.10.

Early Ordovician, Garden City Fm, Zone A. 32-35 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Hystericurus?* sp. E**

HYPOTYPE YPM 18325



Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.54, pl.15, f.10,11,14.

HYPOTYPE YPM 18326

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.54, pl.15, f.13.

Early Ordovician, Garden City Fm. 90 ft above base of Garden City, measured section down from near base of Swan Peak through Garden City, Round Hill, E side of US Rt. 91, and 2 mi N of Mantua, Logan Quad., N sec15T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

### ***Hystericurus? sp. G***

HYPOTYPE YPM 18025

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.55, pl.14, f.1-3.

Early Ordovician, Garden City Fm, Zone B. Lowest beds of Zone B, about 125 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***Hystericurus sp. H***

HYPOTYPE YPM 18028

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.56, pl.14, f.9,10,13.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***Hystericurus? sp. H***

HYPOTYPE YPM 18029

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.56, pl.14, f.11,14,15.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi

long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***Hystericurus? sp. I***

HYPOTYPE YPM 18306

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.56, pl.17, f.1-3.

Early Ordovician, Garden City Fm, Zone C. 236 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Idahoia minor* Raymond**

HOLOTYPE YPM 14743

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1113, pl.3, f.5.

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.480, pl.57, f.43.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Sandy limestone at base of conglomerate, 3.5 mi N of St. Albans, 1 mi S of Rockledge, Franklin Co., Vermont, USA. Collector: Schuchert, C., Keith, A. and Prindle, ?.

### ***Idiomesus tantillus* Raymond**

HOLOTYPE YPM 4726

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.397, pl.12, f.10.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.144, pl.12, f.10.

Rasetti, Franco. 1946b. Am. J. Sci. v.244, n.8, p.538.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Illaenoides elongata* Thomas**

SYNTYPE YPM 26122

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.6, pl.1, f.8.

SYNTYPE YPM 26123

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.6, pl.1, f.9.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Illaenurus breviceps* Raymond**

HOLOTYPE YPM 4737

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.445, pl.14, f.2.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.186, pl.14, f.2.

= *Tatonaspis breviceps*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.39, pl.44, f.16.

PARATYPE YPM 4724

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.445.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.186.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Illaenurus laevis* Raymond**

HOLOTYPE YPM 4719

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.446,447, pl.14, f.4.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.186, pl.14, f.4.

= *Rasettia laevis*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.37, pl.25, f.14,15.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Illaenurus punctatus* Raymond**

HOLOTYPE YPM 14762

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1091.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Illaenurus quadratus* Hall**

HOLOTYPE YPM 4706

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.444.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.185.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Illaenus alveatus* Raymond**

HOLOTYPE YPM 13058

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.109, pl.7, f.5.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.391, pl.48, f.7,9,12.

Middle Ordovician, Table Head Grp. Zone 10 of Logan's section, but may also include Zone 9 and top of 8, mainly lower Table Head, lower Chazy, S from Port au Choix village to lighthouse along gulf north, Point Riche, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 7/31/1910.

HYPOTYPE YPM 13034

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.109.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.391, pl.48, f.11,13,14, f.1,4,5.

Middle Ordovician, Table Head Grp. Zone 10 of Logan's section, same as Point Riche Zone 10, lower Table Head, lower Chazy, bay leading into Sargamelle Cove or the Post office Port au Choix, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 8/3/1910.

***Illaenus erastusi* Raymond**

SYNTYPE YPM 25651

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.351, pl.13, f.8.

=*Basilicus erastusi*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.229.

SYNTYPE YPM 25652

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.351, pl.13, f.9.

=*Bumastus erastusi*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.229, pl.35, f.9.

Middle Ordovician, Chazy Grp. Sloop Bay, Valcour Island, Clinton Co., New York, USA. Collector: Raymond, P.E.

### *Iliaenus globosus* Billings

HYPOTYPE YPM 7395

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.350, pl.13, f.7.

=*Bumastus globosus*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.228, pl.35, f.7.

Middle Ordovician, Chazy Grp. Valcour Island, Clinton Co., New York, USA. Collector: Raymond, P.E.

HYPOTYPE YPM 50069<sup>†</sup>

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.350, pl.13, f.6.

=*Bumastus globosus*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.228, pl.35, f.6.<sup>††</sup>

<sup>†</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

<sup>††</sup>The precise locality of this specimen is unknown. Localities given for this species by Raymond (1910) on p.351 include "Chazy, Valcour Island, Plattsburg, and Crown Point, New York."

### *Iliaenus grandis* (Billings)

HYPOTYPE YPM 10393

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.321, pl.51, f.9.

Early Silurian, Llandovery, Jupiter Fm. Cape Ottawa, near West Jupiter Cliff, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

### *Iliaenus cf. grandis* Billings

HYPOTYPE YPM 12709<sup>†</sup>

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.230.

Early Silurian, Wenlock, La Vieille Fm. Stricklandia Zone W end of section, Black Capes, Quebec, Canada. Collector: Schuchert, C., 8/1905.

<sup>†</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

### *Iliaenus indeterminatus* Walcott

HYPOTYPE YPM 23301

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.347, pl.13, f.1.

=*Bumastus limbatus* Raymond. Syntype. Raymond, P.E. 1910a. Ann. Carnegie Mus. v.7, n.1, p.71.

=*Bumastus limbatus* Raymond. Syntype. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.230, pl.35, f.1.

=*Platillaenus limbatus* (Raymond). Lectotype. Shaw, F.C. 1968. Mem. New York St. Mus. n.17, p.46, pl.19, f.6,7.

HYPOTYPE YPM 25654

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.347, pl.13, f.2.

=*Bumastus limbatus* Raymond. Syntype. Raymond, P.E. 1910a. Ann. Carnegie Mus. v.7, n.1, p.71.

=*Bumastus limbatus* Raymond. Syntype. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.230, pl.35, f.2.

=*Platillaenus limbatus* (Raymond). Paralectotype. Shaw, F.C. 1968. Mem. New York St. Mus. n.17, p.46, pl.19, f.5.<sup>†</sup>

Middle Ordovician. Basal part of formation, center ledges of W side of Smuggler's Harbor, Shaw (1968) loc. V109, Valcour Island, Lake Champlain, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

<sup>†</sup>Cited as a paratype on p.47 and as YPM 23301B on pl.19, f.5.



***Illiaenus marginalis* Raymond**

SYNTYPE YPM 13038

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.109, pl.7, f.9.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.389, pl.48, f.3-5.

SYNTYPE YPM 13045

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.109, pl.7, f.8.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.389, pl.47, f.1,2,4.

Middle Ordovician, Table Head Grp. Zone 10 of Logan's section, but may also include Zone 9 and top of 8, mainly lower Table Head, lower Chazy, S from Port au Choix village to lighthouse along gulf north, Point Riche, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 7/31/1910.

***Illiaenus perceensis* Cooper**

SYNTYPE YPM 12902

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.372, pl.4, f.22.<sup>†</sup>

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Schuchert, C. and Cooper, G.A., 8/1929.

SYNTYPE YPM 12903

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.372.

Late Ordovician, Grande Coupe Beds. Grande Coupe, near the mouth of the small brook in a deep gash on the E side of Mount Ste. Anne about 1 mi N of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

SYNTYPE YPM 12908<sup>†</sup>

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.372.

Early Silurian, Wenlock. Gotland, Sweden.

SYNTYPE YPM 31272

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.372, pl.4, f.24.<sup>††</sup>

SYNTYPE YPM 31273

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.372, pl.4, f.21.<sup>††</sup>

SYNTYPE YPM 31274

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.372, pl.4, f.23.<sup>††</sup>

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Schuchert, C. and Cooper, G.A., 8/1929.

<sup>†</sup>This is a specimen lot of seven individuals.<sup>††</sup>Incorrectly cited as 12908.***Illiaenus viator* Raymond**

SYNTYPE YPM 13032

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.111, pl.6, f.16.

SYNTYPE YPM 13033

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.111, pl.6, f.17.

SYNTYPE YPM 26995 26996

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.111.

Middle Ordovician, Long Point Grp. Green shale, Richmondian, along W shore of Long Point, western Newfoundland, Canada. Collector: Schuchert, C., 7/12/1918.

***Irvingella major* Ulrich and Resser**

HYPOTYPE YPM 18520

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.644, pl.93, f.22,23.

HYPOTYPE YPM 18521

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.644, pl.93, f.14.

HYPOTYPE YPM 18522

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.644, pl.93, f.21.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 68 ft above base of member, dolomite ledges in wheat field S of Potter Creek, S of old school house on Potter

Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Ischyrotoma caudanodosa* (Ross)**

See *Dimeropygiella caudanodosa* Ross.

***Ischyrotoma twenhofeli* Raymond**

HOLOTYPE YPM 13055

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.54, pl.3, f.1,2.

Whittington, H.B. 1963. Bull. Mus. Comp. Zool. (Harvard Univ.) v.129, n.1, p.45, pl.7, f.1,2,4.

Middle Ordovician, Cow Head Grp. Lower Table Head fossils from great limestone blocks, Lower Head, which is 3.5 mi N of Cow Head, western Newfoundland, Canada. Collector: Schuchert, C. and Dunbar, C.O., 8/4/1918.

***Isoteloides* sp.**

HYPOTYPE YPM 18151

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.108, pl.27, f.28-30.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

***Isotelus bearsi* Raymond**

SYNTYPE YPM 7401A

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.345, pl.10, f.21.

=*Vogdesia bearsi*. Raymond, P.E. 1910a. Ann. Carnegie Mus. v7, n.1, p.70.

=*Vogdesia bearsi*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.225, pl.32, f.21.

SYNTYPE YPM 7401B

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.345, pl.10, f.22.

=*Vogdesia bearsi*. Raymond, P.E. 1910a. Ann. Carnegie Mus. v7, n.1, p.70.

=*Vogdesia bearsi*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.225, pl.32, f.22.

SYNTYPE YPM 7401C

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.345, pl.10, f.23,24.

=*Vogdesia bearsi*. Raymond, P.E. 1910a. Ann. Carnegie Mus. v7, n.1, p.70.

=*Vogdesia bearsi*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.225, pl.32, f.23,24.

SYNTYPE YPM 7401D

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.345, pl.10, f.25.

=*Vogdesia bearsi*. Raymond, P.E. 1910a. Ann. Carnegie Mus. v7, n.1, p.70.

=*Vogdesia bearsi*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.225, pl.32, f.25.

Middle Ordovician, Crown Point Limestone. Middle to upper part of formation, Sloop Bay, ledges near water in center of bay shore in dark gray, hard limestone with much pyrite, Shaw (1968) loc. V114, Valcour Island, Lake Champlain, Clinton Co., New York, USA.

***Isotelus cyclops* Green**

HYPOTYPE YPM 26748†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.69, pl.f.7.

Middle Ordovician, Trenton Grp. Western New York, New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Isotelus gigas* DeKay**

HYPOTYPE YPM 26746†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.67.

Late Ordovician, Cincinnati Series. Near Cincinnati, Hamilton Co., Ohio, USA.

†This is a replica. The location of the actual specimen has not been determined.

***Isotelus harrisi* Raymond**

SYNTYPE YPM 23297

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.343, pl.12, f.5.

=*Isotelus platymarginatus* Raymond.

Syntype?. Raymond, P.E. 1910a. Ann. Carnegie Mus. v.7, n.1, p.66.<sup>†</sup>

=*Isotelus platymarginatus* Raymond.

Syntype?. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.225, pl.34, f.4.<sup>†</sup>

Middle Ordovician. Basal part of formation, center ledges of W side of Smuggler's Harbor, Shaw (1968) loc. V109, Valcour Island, Lake Champlain, Clinton Co., New York, USA.  
Collector: Raymond, P.E., 1903.

SYNTYPE YPM 23298

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.343, pl.12, f.3.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.221, pl.34, f.3.

Middle Ordovician, Chazy Grp. Sloop Bay, Valcour Island, Clinton Co., New York, USA.  
Collector: Raymond, P.E.

SYNTYPE YPM 50066<sup>††</sup>

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.343, pl.12, f.7.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.221, pl.34, f.7.

SYNTYPE YPM 50067<sup>††</sup>

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.343, pl.12, f.6.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.221, pl.34, f.6.

SYNTYPE YPM 50068<sup>††</sup>

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.343, pl.12, f.5.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.221, pl.34, f.5.

Middle Ordovician, Chazy Grp. E side of Valcour Island, Lake Champlain, Clinton Co., New York, USA.

<sup>†</sup>The type status of this specimen (YPM 23297) is uncertain. Raymond (1910b) describes and figures this specimen as *Isotelus platymarginalis* sp. nov. (p.225, pl.34, f.4) in the *Report of the Vermont Geologist*. Earlier in 1910 he describes

this taxon in the *Annals of the Carnegie Museum* (Raymond, 1910a: p.66), but does not make any reference to this specimen; however, he does figure two specimens from the Carnegie Museum (CM 1450, pl.17, f.4 and CM 1451, pl.17, f.5). Raymond (1910a) clearly has priority. However, Raymond (1910b: p.225) makes the following statement: "The type is a small specimen collected by Prof. Perkins in the 'buff' material at Isle la Motte, Vermont, and is in the Vermont University Museum." Efforts to locate this specimen have failed and the location of the Vermont University Museum specimen is unknown.

<sup>††</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

### *Isotelus megalops* Green

HYPOTYPE YPM 26749<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.70.

Middle Ordovician, Trenton Limestone. Trenton Falls, Oneida Co., New York, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

### *Isotelus obtusus* Hall

HYPOTYPE YPM 23299

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.344, pl.12, f.2.

=*Onchometopus obtusus*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.222, pl.34, f.2.

Middle Ordovician. Upper most part of formation, Camp Valcour, central Day Point, from silty limestones, 0.6 mi due E of BM148, loc. PL5 of Shaw, 1968. Clinton Co., New York, USA.  
Collector: Raymond, P.E., 1903.

HYPOTYPE YPM 23302

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.344, pl.12, f.1.

=*Onchometopus obtusus*. Raymond, P.E. 1910a. Ann. Carnegie Mus. v.7, n.1, p.64.

=*Onchometopus obtusus*. Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.222, pl.34, f.1.

Middle Ordovician. Basal part of formation, center ledges of W side of Smuggler's Harbor, Shaw (1968)



loc. V109, Valcour Island, Lake Champlain, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

***Isotelus planus DeKay***

HYPOTYPE YPM 26747<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.68.

Middle Ordovician, Trenton Grp. Newport, Campbell Co., Kentucky, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

***Isotelus platymarginatus Raymond***

See *Isotelus harrisi* Raymond.

***Isotelus stegops Green***

HYPOTYPE YPM 26750<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.71.

Middle Ordovician, Trenton Grp. Newport, Campbell Co., Kentucky, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

***Jeffersonia crassimarginata Cullison***

HOLOTYPE YPM 17402

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.75, pl.35, f.15,16.<sup>†</sup>

Early Ordovician, Theodosia Fm. Residual chert blocks, *Leseurilla isabellaensis* and *Orospira elegantula* zone of Blackjack Knob, along Isabella-Hammond road about 1 mi N of Isabella; just N of benchmark in SE corner NE1/4NE1/4sec16,T22N,R15W, Ozark Co., Missouri, USA. Collector: Cullison, J.S.

PARATYPE YPM 17403

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.75, pl.35, f.13.<sup>††</sup>

PARATYPE YPM 17404

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.75, pl.35, f.14.<sup>†††</sup>

Early Ordovician, Theodosia Fm. *Tritoechia typica* and *Leseurilla planodorsalis* zones, middle Theodosia, on MO Hwy 80 at junction with old road, elevation 920 ft; SW corner NE1/4SE1/4sec14,T22N,R17W, Taney Co., Missouri, USA. Collector: Cullison, J.S.

<sup>†</sup>Not 17177 as published on p.80 and in the explanation for pl.35, f.15,16.

<sup>††</sup>Not 17178 as published on p.80 and in the explanation for pl.35, f.13.

<sup>†††</sup>Not 17179 as published on p.80 and in the explanation for pl.35, f.14.

***Jeffersonia granosa Cullison***

PARATYPE YPM 17171

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.72.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert nodules, elevation 1020 ft, Rolla quadrangle, E1/2E1/2SW1/4sec03,T37N,R08W, Phelps Co., Missouri, USA. Collector: Polhemus, J.

PARATYPE YPM 17172

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.72.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. N bank of ditch E of house, elevation 1000 ft; NE1/4SE1/4sec33,T38N,R08W, Phelps Co., Missouri, USA. Collector: Cullison, J.S.

***Jeffersonia jennii Cullison***

HOLOTYPE YPM 17405

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.76, pl.35, f.17-19.<sup>†</sup>

PARATYPE YPM 17406

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.76, pl.35, f.21,22.<sup>††</sup>

Early Ordovician, Cotter Fm. Massive, gray, granular dolomite, *Jeffersonia jennii* and *Campbelloceras simplex* zone of lower Cotter, road from MO Hwy 25 down to Crystal City Glass Workers Country Club; SW1/4sec 27,T40N,R06E, Jefferson Co., Missouri, USA. Collector: Cullison, J.S.

<sup>†</sup>Not 17180 as published on p.80 and in the explanation for pl.35, f.18,19.

††Not 17181 as published on p.80 and in the explanation for pl.35, f.21,22.

### ***Jeffersonia mediocrista* Cullison**

PARATYPE YPM 17173

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.74.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert and in place, immediate vicinity of the adit of the Missouri School of Mines and Metallurgy Experimental Mine, elevation 1000 ft; SE corner SW1/4SW1/4sec10,T37N,R08W, Phelps Co., Missouri, USA. Collector: Cullison, J.S.

### ***Jeffersonia missouriensis* Cullison**

HOLOTYPE YPM 17166

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.71, pl.34, f.10,12.

PARATYPE YPM 17167, 17168

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.71.

PARATYPE YPM 17169

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.71.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert and in place, immediate vicinity of the adit of the Missouri School of Mines and Metallurgy Experimental Mine, elevation 1000 ft; SE corner SW1/4SW1/4sec10,T37N,R08W, Phelps Co., Missouri, USA. Collector: Cullison, J.S.

### ***Jeffersonia peltabella* Ross**

HOLOTYPE YPM 18056

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.76, pl.17, f.19,21.

PARATYPE YPM 18053

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.76, pl.17, f.8,12,17.

PARATYPE YPM 18054

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.76, pl.17, f.16,20,22.

PARATYPE YPM 18055

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.76, pl.17, f.7,13,18.

Early Ordovician, Garden City Fm, Zone G(2)e. 704-786 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946.

### ***Jeffersonia producta* Cullison**

PARATYPE YPM 17163

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.73, pl.34, f.3.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert nodules, elevation 1020 ft, Rolla quadrangle, E1/2E1/2SW1/4sec03,T37N,R08W, Phelps Co., Missouri, USA. Collector: Polhemus, J.

PARATYPE YPM 17164

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.73, pl.34, f.7.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert, middle Rich Fountain Fm, saddle on N side of the road just E of the road fork; center of north line SE1/4SW1/4sec27,T39N,R08W, Maries Co., Missouri, USA. Collector: Cullison, J.S.

PARATYPE YPM 17165

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.73.

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Residual chert nodules, elevation 1020 ft, Rolla quadrangle, E1/2E1/2SW1/4sec03,T37N,R08W, Phelps Co., Missouri, USA. Collector: Polhemus, J.

### ***Kaninia? platys* Raymond**

HOLOTYPE YPM 14738

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1110, pl.3, f.4.

=*Blountia* (*Homodictya*) *imitatrix* (Raymond). Hypotype. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.473, pl.57, f.26.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. In limestone pebble, 4.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Prindle, ?.

***Kawina sexapugia* Ross**

HOLOTYPE YPM 18289

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.127, pl.35, f.6,11,12.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

PARATYPE YPM 18290

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.127, pl.35, f.14.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

PARATYPE YPM 18291

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.127, pl.35, f.13.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18292

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.127, pl.35, f.7.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18293

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.127, pl.35, f.15,16,19.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

PARATYPE YPM 18294

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.127, pl.35, f.21.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

PARATYPE YPM 18295

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.127, pl.35, f.17,20.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18751

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.644, pl.62, f.2.<sup>†</sup>

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

HYPOTYPE YPM 18752

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.644, pl.62, f.1.<sup>†</sup>

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

HYPOTYPE YPM 18753

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.644, pl.62, f.5.

=*Forteyops sexapugia*. Pribyl, A., J. Vanek and I. Pek. 1985. Sb. Pr. Prir. Fak. Univ. Palack. Olom. Geogr.-Geol. v.83, p.165.

Early Ordovician, Garden City Fm, Zone J. 265-350 ft below top of Garden City, measured section down from near base of Swan Peak into



Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1949.

†The specimen is present but is crushed and unrecognizable.

***Keithia schucherti* Raymond**

HOLOTYPE YPM 4715

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.452, pl.14, f.5,9.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.191, pl.14, f.5,9.

Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1019.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.30, pl.18, f.11.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Keithiella raymondi* Rasetti**

See *Highgatea biusinuta* Raymond.

***Keithiella? raymondi* Rasetti**

See *Highgatea biusinuta* Raymond.

***Keithiella schucherti* Raymond**

See *Highgatea biusinuta* Raymond.

***Kettneraspis tuberculata* (Hall)**

See *Leonaspis tuberculata* (Hall).

***Kindbladla wichaensis* (Resser)**

HYPOTYPE YPM 18529

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.645, pl.92, f.23.

Late Cambrian, Gatesburg Fm. Gray crystalline limestone, pinkish intraformational conglomerate, 49 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Kingstonia ara* Walcott**

HYPOTYPE YPM 15862, 30496-30498

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466.

Cambrian. Near Little Green Garden, Cape St. George, Newfoundland, Canada. Collector: Dunbar, C.O., 1920.

***Kingstonia (Kingstonia) scrinium* (Raymond)**

HYPOTYPE YPM 18626

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.472, pl.57, f.47,48.

HYPOTYPE YPM 15860

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466, pl.57, f.5,6.

HYPOTYPE YPM 15861

Lochman, C. 1938. J. Paleont. v.12, n.5, p.466, pl.57, f.7,8.

Cambrian. Near Little Green Gardens, Cape St. George, Newfoundland, Canada. Collector: Dunbar, C.O., 1920.

***Kingstonia vagrans* Lochman**

HOLOTYPE YPM 15841

Lochman, C. 1938. J. Paleont. v.12, n.5, p.471, pl.56, f.22,23.

Late Cambrian, Shallow Bay Fm. Loc. 3 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

PARATYPE YPM 15842

Lochman, C. 1938. J. Paleont. v.12, n.5, p.471, pl.56, f.24.

PARATYPE YPM 30499, 31321

Lochman, C. 1938. J. Paleont. v.12, n.5, p.471.

Middle Cambrian, March Point Fm. Zone 10, March Point section, to the E along shore, St. George Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O. and Leith, E.I., 1933.

***Kirkella declevita* Ross**

HOLOTYPE YPM 18138

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.91, pl.21, f.5.

PARATYPE YPM 18133

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.91, pl.21, f.1.

PARATYPE YPM 18134

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.21, f.2.

PARATYPE YPM 18135

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91.

PARATYPE YPM 18136

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.21, f.3.

PARATYPE YPM 18137

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.21, f.4.

PARATYPE YPM 18139

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.21, f.7,8,10.

PARATYPE YPM 18140

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.21, f.6.

PARATYPE YPM 18141

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.21, f.9,11,12.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18360

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.22, f.4.

PARATYPE YPM 18361

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.22, f.5.

PARATYPE YPM 18364

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.23, f.2.

PARATYPE YPM 18365

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.23, f.1.

PARATYPE YPM 18366

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.91, pl.23, f.3.

Early Ordovician, Garden City Fm, Zone J. 265-350 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

**Kirkella sp.**

HYPOTYPE YPM 18329

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.94, pl.26, f.18.

HYPOTYPE YPM 18330

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.94, pl.26, f.14.

Ordovician, Garden City Fm. 915 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

**Kyphocephalus ponderosus Wilson**

HOLOTYPE YPM 18484

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.646, pl.93, f.16,17.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18583

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.646, pl.93, f.19.

HYPOTYPE YPM 18602

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.646, pl.93, f.18.†

Late Cambrian, Gatesburg Fm. Float near middle of Ore Hill, Ore Hill Quarry, quarry 0.25 mi E of crossroads of PA Hwy 686 and road leading E to

Ore Hill, S of road, Bloomfield Township, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

†The image is reversed in pl.93, f.18.

***Lachnostoma latucelsum* Ross**

HOLOTYPE YPM 18144

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.20.

PARATYPE YPM 18142

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.13,14,16.

PARATYPE YPM 18143

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95.

PARATYPE YPM 18145

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.15,19.

PARATYPE YPM 18146

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.17,18,21.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18308

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.23.

PARATYPE YPM 18309

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.24.

PARATYPE YPM 18310

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.25.

Early Ordovician, Garden City Fm, Zone J. 131-135 ft below top of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E

of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18358

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.22, f.7.

PARATYPE YPM 18359

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.22, f.6.

PARATYPE YPM 18362

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.22, f.3.

PARATYPE YPM 18363

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.22, f.8.

PARATYPE YPM 18367

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.21, f.22.

PARATYPE YPM 18368

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.23, f.6.

PARATYPE YPM 18369

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.95, pl.23, f.5.

Early Ordovician, Garden City Fm, Zone J. 265-350 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

***Lecanopleura? howsei* Troelsen**

HOLOTYPE YPM 26191

Troelsen, J.C. 1947. Am. J. Sci. v.245, n.9, p.540, pl.1, f.1-3.

Late Cambrian, East Arm Fm. SW of entrance to SE arm of Bonne Bay, Newfoundland, Canada. Collector: Johnson, H., 1945.

***Lecanopleura inflecta* Raymond**

HOLOTYPE YPM 14740



Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1111, pl.3, f.2.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

***Lecanopleura interrupta* Raymond**

HOLOTYPE YPM 14739

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1111, pl.3, f.1.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

***Lecanopyge expansa* Raymond**

HOLOTYPE YPM 14718

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1101, pl.2, f.6.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.36, pl.23, f.1.

PARATYPE YPM 14719

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1101, pl.2, f.8.

PARATYPE YPM 14720

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1101, pl.2, f.7.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.36, pl.23, f.2.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Leiocoryphe brevis* Raymond**

See *Stenopilus brevis* Raymond.

***Leiocorphye? prisca* Rasetti**

HYPOTYPE YPM 18627, 18628

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.470, pl.57, f.42.

HYPOTYPE YPM 18644

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.471.

***Leiostegium cingulosum* Raymond**

HOLOTYPE YPM 4712

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.456, pl.14, f.21.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.195, pl.14, f.21.

PARATYPE YPM 24274

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.456, pl.14, f.18.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.195, pl.14, f.18.

Early Ordovician, Highgate Limestone. Lower part of formation, 1.5 mi N Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Leiostegium manitouense* Walcott**

HYPOTYPE YPM 18312

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.106, pl.27, f.1.

Early Ordovician, Garden City Fm, Zone D. 244 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Leiostegium puteatum* Raymond**

HOLOTYPE YPM 4739

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.455, pl.14, f.19.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.194, pl.14, f.19.

HYPOTYPE YPM 4702

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.455, pl.14, f.12.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.194, pl.14, f.12.

Early Ordovician, Highgate Limestone. Lower part of formation, Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C., 1922.

***Leonaspis parva* Cooper**

HOLOTYPE YPM 12915

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20, n.119, p.381, pl.5, f.15.

Lesperance, P.J. 1968. J. Paleont. v.42, n.3, p.816.

Silurian, Llandoverly, Whitehead Fm, L'Irlande Mbr. Thin clinking limestone plates in the farmed fields to the NW of Cap Blanc Lighthouse, SW of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Schuchert, C., 8/1929.

***Leonaspis tuberculata* (Hall)**

HYPOTYPE YPM 20120

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, pl.34, f.2.†

=*Kettneraspis tuberculata* . Ramsköld, L. and B.D.E. Chatterton. 1991. Trans. Roy. Soc. Edinburgh: Earth Sci. v.82, p.357.

HYPOTYPE YPM 20121

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, pl.34, f.1.

=*Kettneraspis tuberculata* . Ramsköld, L. and B.D.E. Chatterton. 1991. Trans. Roy. Soc. Edinburgh: Earth Sci. v.82, p.357.

HYPOTYPE YPM 20122

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, pl.34, f.6.

=*Kettneraspis tuberculata* . Ramsköld, L. and B.D.E. Chatterton. 1991. Trans. Roy. Soc. Edinburgh: Earth Sci. v.82, p.357.

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarksville, Albany Co., New York, USA. Collector: Beecher, C.E., 1887.

†Incorrectly cited as YPM 3586C.

***Leptopilus declivis* Raymond**

HOLOTYPE YPM 4704

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.430, pl.13, f.20.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.173, pl.13, f.20.

Early Ordovician, Highgate Limestone. 2 mi N of Highgate Center, lower part of formation, Franklin Co., Vermont, USA. Collector: Schuchert, C., 1922.

***Lichas (Conolichas) pustulosus* Hall**

HYPOTYPE YPM 26161

Hall, J. and J.M. Clarke. 1888. Paleont. New York, v.7, p.80, pl.19, f.8.

Early Devonian, Helderberg Grp. Lower Helderberg, Clarksville, Albany Co., New York, USA.

***Licnocephala bicornuta* Ross**

HOLOTYPE YPM 18180

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.110, pl.28, f.13,14.

=*Licnocephala cavigliadius* Hintze. Hypotype. Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

PARATYPE YPM 18181

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.110, pl.28, f.12.

=*Licnocephala cavigliadius* Hintze. Hypotype. Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

PARATYPE YPM 18213

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.110, pl.30, f.25.

=*Licnocephala cavigliadius* Hintze. Hypotype. Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Licnocephala cavigliadius* Hintze**

HYPOTYPE YPM 18696

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.642, pl.64, f.25.†

Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

**HYPOTYPE YPM 18697**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.28.<sup>††</sup>

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18698**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.29.<sup>†††</sup>

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18699**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.27.<sup>†††</sup>

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18787**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.63, f.1.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18788**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.14.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18789**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.8.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18790**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.18.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18791**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.20.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18792**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.15,19.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18793**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.21-23.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18794**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.5,7.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18795**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.4.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18796**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642,642, pl.64, f.6,10.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18797**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642,642, pl.64, f.24.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18798**

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.642, pl.64, f.9.

Lee, D.C. and B.D.E. Chatterton. 1997. *J. Paleont.* v.71, n.3, p.439.

**HYPOTYPE YPM 18799**



Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.642, pl.64, f.11.

Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

**HYPOTYPE** YPM 18800

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.642, pl.64, f.12,13,16,17.

Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

Early Ordovician, Garden City Fm, Zone G(2). 609 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

†Not 18801 as published on p.643 and pl.64, f.25.

††Not 18802 as published on p.643 and pl.64, f.28.

†††Not 18803 as published on p.643 and pl.64, f.29.

††††Not 18804 as published on p.643 and pl.64, f.27.

See also *Licnocephala bicornuta* Ross, *Licnocephala ovata* Ross, and *Licnocephala?* sp.

### ***Licnocephala ovata* Ross**

**HYPOTYPE** YPM 18700

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.644, pl.64, f.1-3.†

=*Licnocephala cavigliadius* Hintze. Hypotype. Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

Early Ordovician, Garden City Fm, Zone G(2). 609 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

†Not 18805 as published on p.644 and pl.64, f.1-3.

### ***Licnocephala?* sp.**

**HYPOTYPE** YPM 18179

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.112, pl.28, f.4,5,9.

=*Licnocephala cavigliadius* Hintze. Hypotype. Lee, D.C. and B.D.E. Chatterton. 1997. J. Paleont. v.71, n.3, p.439.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Liostracinoides vermontanus* Raymond**

**HOLOTYPE** YPM 14710

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1092, pl.1, f.20.

Ludvigsen, Rolf. 1982. Contrib. Roy. Ont. Mus. n.134, p.95, ff.70-P.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

### ***Litagnostus planulatus* (Raymond)**

See *Phalacroma cyclostigma* Raymond and *Phalacroma parilis* (Hall).

### ***Litagnostus raymondi* Shaw**

See *Phalacroma parilis* (Hall).

### ***Lloydia brevis* Raymond**

**HOLOTYPE** YPM 14798

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1100, pl.4, f.27.

Early Ordovician, Highgate Limestone. Lower part of formation, 15 ft beneath Grandge Fm, Grandge Farm, 4.5 mi N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C., Raymond, P.E. and McGerrigle, H.W.

### ***Lloydia seelyi* (Walcott)**

**HYPOTYPE** YPM 4718, 24275

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.411.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.155.

Early Ordovician, Highgate Limestone. Lower part of formation, N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Loganellus laeviuscula* (Raymond)**

See *Highgatea bisinuata* Raymond and  
*Highgatea laeviuscula* Raymond.

***Lonchodomas halli* (Billings)**

HYPOTYPE YPM 23306

Raymond, P.E. 1905a. Ann. Carnegie Mus.  
v.3, n.2, p.332, pl.10, f.3,4.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol.  
p.216, pl.32, f.3,4.

HYPOTYPE YPM 25694

Raymond, P.E. 1905a. Ann. Carnegie Mus.  
v.3, n.2, p.332, pl.10, f.5-7.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol.  
p.216, pl.32, f.5-7.

Middle Ordovician, Crown Point Limestone. Sloop  
Bay, Valcour Island, Clinton Co., New York, USA.  
Collector: Raymond, P.E., 1903.

***Lonchodomas longirostris* Cooper**

SYNTYPE YPM 12909†

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370.

Late Ordovician, Grande Coupe Beds. South  
Cove, S of Perce, Gaspé Peninsula, Quebec,  
Canada. Collector: Cooper, G.A., 8/1929.

SYNTYPE YPM 31277

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370, pl.4, f.12,18.††

SYNTYPE YPM 31278

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370, pl.4, f.14.††

SYNTYPE YPM 31279

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370, pl.4, f.16.††

SYNTYPE YPM 31280

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370, pl.4, f.17.††

SYNTYPE YPM 31281

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370, pl.4, f.13.††

SYNTYPE YPM 31282

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370, pl.4, f.11.††

SYNTYPE YPM 31283

Cooper, G.A. 1930. Am. J. Sci. ser.5,v.20,  
n.119, p.370, pl.4, f.15.††

Late Ordovician, Grande Coupe Beds. South  
Cove, S of Perce, Gaspé Peninsula, Quebec,  
Canada. Collector: Cooper, G.A., 8/1929.

†This is a specimen lot of eleven individuals.

††Cited as YPM 12909.

***Lygdozoon collatum* Holloway**

See *Dalmanites arkansana* Van Ingen.

***Macropyge gladiator* Ross**

HOLOTYPE YPM 18132

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.122, pl.30, f.22.

PARATYPE YPM 18131

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.122, pl.30, f.14.

PARATYPE YPM 18169

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.122, pl.27, f.8-10.

Early Ordovician, Garden City Fm, Zone G(2)a.  
498 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1949.

HYPOTYPE YPM 18725

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.1.†

HYPOTYPE YPM 18726

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.2.††

HYPOTYPE YPM 18727

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.3.†††

HYPOTYPE YPM 18728

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.4.††††

HYPOTYPE YPM 18729

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.5.†††††

HYPOTYPE YPM 18730

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.6.†††††

HYPOTYPE YPM 18731

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.6.†††††††

HYPOTYPE YPM 18732

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.8.††††††††

HYPOTYPE YPM 18733

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.9.†††††††††

HYPOTYPE YPM 18734

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.585, pl.84, f.10.††††††††††

Early Ordovician, Garden City Fm, Zone G(2).  
521 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1949.

†Not 18425 as published in the explanation for  
pl.84, f.1.

††Not 18426 as published in the explanation for  
pl.84, f.2.

†††Not 18427 as published in the explanation for  
pl.84, f.3.

††††Not 18428 as published in the explanation for  
pl.84, f.4.

†††††Not 18429 as published in the explanation for  
pl.84, f.5.

††††††Not 18430 as published in the explanation  
for pl.84, f.6.

†††††††Not 18431 as published in the explanation  
for pl.84, f.7.

††††††††Not 18432 as published in the explanation  
for pl.84, f.8.

†††††††††Not 18433 as published in the  
explanation for pl.84, f.9.

††††††††††Not 18434 as published in the  
explanation for pl.84, f.10.

### ***Marjuria newfoundlandensis* Lochman**

HOLOTYPE YPM 15801

Lochman, C. 1938. J. Paleont. v.12, n.5,  
p.464, pl.56, f.32.

PARATYPE YPM 15802

Lochman, C. 1938. J. Paleont. v.12, n.5,  
p.464, pl.56, f.35.

PARATYPE YPM 15803

Lochman, C. 1938. J. Paleont. v.12, n.5, p.464.

PARATYPE YPM 31322

Lochman, C. 1938. J. Paleont. v.12, n.5,  
p.464, pl.56, f.33.

PARATYPE YPM 31323

Lochman, C. 1938. J. Paleont. v.12, n.5,  
p.464, pl.56, f.34.

PARATYPE YPM 31324-31329

Lochman, C. 1938. J. Paleont. v.12, n.5, p.464.

Middle Cambrian, March Point Fm. Zone 10,  
March Point section, to the E along shore, St.  
George Peninsula, western Newfoundland, Canada.  
Collector: Dunbar, C.O. and Leith, E.I., 1933.

### ***Maryvillia arion* Walcott**

HYPOTYPE YPM 15821

Lochman, C. 1938. J. Paleont. v.12, n.5,  
p.469, pl.57, f.4(left).

=*Blountia terranovica* Resser. Paratype?.  
Resser, C.E. 1942. Smith. Misc. Coll. v.101,  
n.15, p.8.†

HYPOTYPE YPM 31330

Lochman, C. 1938. J. Paleont. v.12, n.5,  
p.469, pl.57, f.4(right).

=*Blountia terranovica* Resser. Holotype?.  
Resser, C.E. 1942. Smith. Misc. Coll. v.101,  
n.15, p.8.



Middle Cambrian, March Point Fm. Zone 24, March Point section, to the E along shore, St. George Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O. and Leith, E.I., 1933.

†The type status of this specimen is questionable. YPM 15821 is lot of two individuals.

***Maryvillia triangularis* Raymond**

HOLOTYPE YPM 4707

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.410, pl.12, f.21.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.155, pl.12, f.21.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

HYPOTYPE YPM 14741

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1112, pl.3, f.3.

=*Protillanenus marginatus* Raymond.

Hypotype. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.474, pl.57, f.16.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. In limestone pebble, 4.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Prindle, ?.

***Megalaspis huttoni* (Billings)**

HYPOTYPE YPM 13027

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.80, pl.6, f.11.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 2, upper Table Head, Normanskill, S base of Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 8/7/1910.

***Menoparia genalunata* Ross**

HOLOTYPE YPM 18122

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.23,24,28.

Early Ordovician, Garden City Fm, Zone G(2)a. 558 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston,

Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18116

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.17-19.

PARATYPE YPM 18117

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.15-16.

Early Ordovician, Garden City Fm. 495 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18118

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.14,21.

PARATYPE YPM 18119

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.13.

PARATYPE YPM 18120

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.20,22.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18123

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.29.

PARATYPE YPM 18124

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.88, pl.20, f.34,35.

Early Ordovician, Garden City Fm, Zone G(2)c. 558 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18384

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.579, pl.81, f.1-3.

HYPOTYPE YPM 18385

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.579, pl.81, f.10-11.

HYPOTYPE YPM 18386

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.579, pl.81, f.4-9.

HYPOTYPE YPM 18387

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.579, pl.81, f.12.

HYPOTYPE YPM 18388

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.579, pl.81, f.13.

HYPOTYPE YPM 18389

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.579, pl.81, f.14.

HYPOTYPE YPM 18390

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.581, pl.83, f.19.

HYPOTYPE YPM 18395

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.581, pl.81, f.19.

HYPOTYPE YPM 18396

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.581, pl.83, f.21.

HYPOTYPE YPM 18397

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.581, pl.81, f.18.

HYPOTYPE YPM 18398

Ross, R.J., Jr. 1951b. *J. Paleont.* v.25, n.5, p.581, pl.83, f.20.

HYPOTYPE YPM 18754

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.14.

Early Ordovician, Garden City Fm, Zone G(2)a.  
498 ft above base of Garden City, measured

section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

HYPOTYPE YPM 18756

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.6.

HYPOTYPE YPM 18757

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.7, 11, 15.

HYPOTYPE YPM 18758

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.9, 10, 13.

HYPOTYPE YPM 18759

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.3.

HYPOTYPE YPM 18760

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.4.

HYPOTYPE YPM 18761

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.15.

HYPOTYPE YPM 18762

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.17.

HYPOTYPE YPM 18763

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.19.

HYPOTYPE YPM 18765

Ross, R.J., Jr. 1953a. *J. Paleont.* v.27, n.5, p.634, pl.62, f.20.<sup>†</sup>

Ordovician, Garden City Fm. 480 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

<sup>†</sup>Specimen lost.

***Menoparia lunalata* Ross**

HOLOTYPE YPM 18766

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.635, pl.62, f.22-24.

Early Ordovician, Garden City Fm, Zone G(2). 609 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

***Meteoraspis borealis* Lochman**

HOLOTYPE YPM 15849

Lochman, C. 1938. J. Paleont. v.12, n.5, p.472, pl.56, f.2,5.

Late Cambrian, Shallow Bay Fm. Loc. 3 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

PARATYPE YPM 15850

Lochman, C. 1938. J. Paleont. v.12, n.5, p.472, pl.56, f.1.

Late Cambrian, Shallow Bay Fm. Loc. 2 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

PARATYPE YPM 15851

Lochman, C. 1938. J. Paleont. v.12, n.5, p.472.

Late Cambrian, Shallow Bay Fm. Upper Cambrian blocks in Cow Head, from outer of gulf side of Cow Head Peninsula, Cow Head, western Newfoundland, Canada. Collector: Schuchert, C., Dunbar, C.O. and Edwards, W.S., 7/30/1918.

PARATYPE YPM 15852

Lochman, C. 1938. J. Paleont. v.12, n.5, p.472.

PARATYPE YPM 15853

Lochman, C. 1938. J. Paleont. v.12, n.5, p.472, pl.56, f.3,4.

Late Cambrian, Shallow Bay Fm. Loc. 3 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

PARATYPE YPM 15854†

Lochman, C. 1938. J. Paleont. v.12, n.5, p.472.

Late Cambrian, Shallow Bay Fm. Loc. 2 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

†This is specimen lot of two individuals.

***Meteoraspis? minuta* (Raymond)**

HYPOTYPE YPM 14734

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.476.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. In limestone pebble, 4.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Prindle, ?.

See also *Coleopachys pisum* Raymond, *Coleopachys strix* Raymond, *Dunderbergia vermontensis* Raymond and *Paracrevicephalus* cf. *P. thoosa* (Walcott).

***Micragaulos decorus* Howell**

PARATYPE YPM 13440

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1189.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13441

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1189.

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Micragnostus innocens* (Clark)**

See *Agnostus innocens* Clark.

***Micragnostus insuetus* (Raymond)**

See *Agnostus insuetus* Raymond.

***Millardia avitas* Walcott**

See *Millardia lochmanae* Resser.

***Millardia lochmanae* Resser**

HOLOTYPE YPM 15822

Resser, C.E. 1938. Smith. Misc. Coll. v.97, n.10, p.36.



=*Millardia avitas* Walcott. Hypotype.  
Lochman, C. 1938. J. Paleont. v.12, n.5,  
p.469, pl.56, f.27,28.

Middle Cambrian, March Point Fm. Zone 24,  
March Point section, to the E along shore, St.  
George Peninsula, western Newfoundland, Canada.  
Collector: Dunbar, C.O. and Leith, E.I., 1933.

***Miracybele mira* (Billings)**

HYPOTYPE YPM 23328

Whittington, H.B. 1965. Bull. Mus. Comp.  
Zool. (Harvard Univ.) v.132, n.4, p.424.†

=*Cybelurus mira*. Bursky, A.Z. 1970. Inst.  
Geol. Arktiki. Leningrad. p.129.

Dean, W.T. 1973. Bull. Geol. Surv. Can.  
n.233, p.10.

Tripp, R.P. 1976. Trans. Roy. Soc.  
Edinburgh. v.69, p.407.

Fortey, R.A. 1980. Norsk Polarinst. Sk.  
n.171, p.94.

Middle Ordovician, Table Head Grp. Division 11  
or L, or 11 Zone 3, the *Leperditia* beds, middle  
Table Head, middle Chazy, NE side of Table  
Head, western Newfoundland, Canada. Collector:  
Schuchert, C. and Twenhofel, W.H., 8/6/1910.

See also *Cybele mira* (Billings).

†Incorrectly cited as a paralectotype.

***Monodechenella curvimarginata* (Hall  
and Clarke)**

HYPOTYPE YPM 33832

Lieberman, B.S. 1994. Bull. Am. Mus. Nat.  
Hist. n.223, p.143, tf.38.6-8.

HYPOTYPE YPM 33834

Lieberman, B.S. 1994. Bull. Am. Mus. Nat.  
Hist. n.223, p.143.

HYPOTYPE YPM 33835

Lieberman, B.S. 1994. Bull. Am. Mus. Nat.  
Hist. n.223, p.143, tf.38.4,5.

HYPOTYPE YPM 33836

Lieberman, B.S. 1994. Bull. Am. Mus. Nat.  
Hist. n.223, p.143, tf.38.3.

HYPOTYPE YPM 33837

Lieberman, B.S. 1994. Bull. Am. Mus. Nat.  
Hist. n.223, p.143, tf.38.1,2.

Middle Devonian, Onondaga Grp, Jeffersonville  
Limestone. Waverly, Morgan Co., Indiana, USA.

***Monodechenella macrocephala* (Hall)**

HYPOTYPE YPM 33766, 33768, 33769, 33771

Lieberman, B.S. 1994. Bull. Am. Mus. Nat.  
Hist. n.223, p.145.

Middle Devonian, Hamilton Grp. Eighteen Mile  
Creek, Erie Co., New York, USA.

HYPOTYPE YPM 33824

Lieberman, B.S. 1994. Bull. Am. Mus. Nat.  
Hist. n.223, p.145.

Middle Devonian, Hamilton Grp. Canandaigua  
Lake, New York, USA. Collector: Beecher, C.E.

***Nieszkowskia excelsus* Raymond**

HOLOTYPE YPM 13046

Raymond, P.E. 1925. Bull. Mus. Comp.  
Zool. (Harvard Univ.) v.67, n.1, p.145, pl.10, f.8.

=*Xystocrania perforator* (Billings).

Hypotype. Whittington, H.B. 1965. Bull.  
Mus. Comp. Zool. (Harvard Univ.) v.132,  
n.4, p.413, pl.61, f.4,7,10.

Middle Ordovician, Table Head Grp. Zone 10 of  
Logan's section, same as Point Riche Zone 10,  
lower Table Head, lower Chazy, bay leading into  
Sargamelle Cove or the post office Port au Choix,  
western Newfoundland, Canada. Collector:  
Schuchert, C. and Twenhofel, W.H., 8/3/1910.

***Nieszkowskia perforator* (Billings)**

HYPOTYPE YPM 23332

Raymond, P.E. 1925. Bull. Mus. Comp.  
Zool. (Harvard Univ.) v.67, n.1, p.146.

=*Xystocrania perforator*. Whittington, H.B.  
1965. Bull. Mus. Comp. Zool. (Harvard  
Univ.) v.132, n.4, p.413.

Middle Ordovician, Table Head Grp. Zone 10 of  
Logan's section, but may also include Zone 9 and  
top of 8, mainly lower Table Head, lower Chazy,  
S from Port au Choix village to lighthouse along  
gulf north, Point Riche, western Newfoundland,  
Canada. Collector: Schuchert, C. and Twenhofel,  
W.H., 7/31/1910.

***Niobe lineolata* Raymond**

HOLOTYPE YPM 13042

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.79, pl.3, f.15.

=*Peraspis lineolata*. Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.364, pl.34, f.1,2, pl.36, f.11.

Middle Ordovician, Table Head Grp. Upper Table Head, Normanskill, about 1 mi NW of Dominion Iron and Steel Co., W shore of West Bay, Port au Port, western Newfoundland, Canada. Collector: Schuchert, C., Dunbar, C.O. and Edwards, W.S., 7/16/1918.

PARATYPE YPM 13047

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.79, pl.3, f.16.

=*Peraspis lineolata*. Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.364, pl.35, f.1.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 2, upper Table Head, Normanskill, S base of Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 8/7/1910.

***Niobe quadraticaudata* (Billings)**

HYPOTYPE YPM 13041

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.76, pl.6, f.13.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.351, pl.24, f.1,2,6.

HYPOTYPE YPM 13044

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.77, pl.3, f.20.

Whittington, H.B. 1965. Bull. Mus. Comp. Zool. (Harvard Univ.) v.132, n.4, p.351.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 1, upper Table Head, Normanskill, S base of Table Head, western Newfoundland, Canada. Collector: Schuchert, C. and Twenhofel, W.H., 1910.

***Niobe? sp.***

HYPOTYPE YPM 18152

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.106, pl.27, f.31.

HYPOTYPE YPM 18153

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.106, pl.27, f.24-25.

HYPOTYPE YPM 18154

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.106, pl.27, f.26.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Niobe? sp. ind.***

HYPOTYPE YPM 4728

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.427.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.170.

Early Ordovician, Georgia Slate. Boulder in formation, 5 mi N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C., 1922.

***Norwoodia katherina* Lochman**

HOLOTYPE YPM 15832

Lochman, C. 1938. J. Paleont. v.12, n.5, p.473, pl.56, f.20.

PARATYPE YPM 15833

Lochman, C. 1938. J. Paleont. v.12, n.5, p.473.

PARATYPE YPM 15834

Lochman, C. 1938. J. Paleont. v.12, n.5, p.473, pl.56, f.21.

PARATYPE YPM 15835

Lochman, C. 1938. J. Paleont. v.12, n.5, p.473, pl.56, f.19.

PARATYPE YPM 15836, 31332, 31333

Lochman, C. 1938. J. Paleont. v.12, n.5, p.473.

Late Cambrian, Shallow Bay Fm. Loc. 3 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

***Novaspis elevata* (Cooper and Kindle)**

HYPOTYPE YPM 26201

Whittington, H.B. 1941. J. Paleont. v.15, n.1, p.40, pl.6, f.7,8.

Late Ordovician, Grande Coupe Beds. Priest's Road, 2 mi W of Perce village, Gaspé Peninsula, Quebec, Canada. Collector: Whittington, H.B., 1940.

***Nucleurus anticostiensis* (Twenhofel)**

See *Encrinurus anticostiensis* Twenhofel.

***Nuttania sparsa* Eaton**HYPOTYPE YPM 26756<sup>†</sup>

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.89.

Early Devonian, Helderberg Grp. Coeymans, Albany Co., New York, USA.

<sup>†</sup>This is a replica. The location of the actual specimen has not been determined.

***Odontochile dunbari* Delo**

HOLOTYPE YPM 25581

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.56, pl.5, f.7.<sup>†</sup>

=*Forillonaria dunbari*. Lesperance, P.J. 1975. J. Paleont. v.49, n.1, p.127, pl.6, f.1.

Early Devonian, Bailey Limestone. Little Saline Creek, Sainte Genevieve Co., Missouri, USA.

<sup>†</sup>Incorrectly cited as YPM 15236.

***Odontochile lindenensis* Delo**

HOLOTYPE YPM 25582

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.57, pl.4, f.26.<sup>†</sup>

Early Devonian, Linden Grp, Birdsong Shale. Higher portion of Birdsong, 4-9 ft below top, bluff on Big Sandy River, beneath the "steel bridge," about 1 mi W of Cashlee's store (formerly Pace PO). Henry Co., Tennessee, USA. Collector: Dunbar, C.O., 1917.

<sup>†</sup>Incorrectly cited as YPM 15236.

***Odontochile purduei* Dunbar**

See *Dalmanites purduei* Dunbar.

***Odontopleura arkansana* Van Ingen**

HYPOTYPE YPM 26135

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.20, pl.1, f.21.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Olenellus getzi* Dunbar**

HOLOTYPE YPM 6657

Dunbar, C.O. 1925. Am. J. Sci. ser.5, v.9, n.52, p.307, tf.1.

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.221, pl.5, f.2.<sup>†</sup>

PARATYPE YPM 31959

Dunbar, C.O. 1925. Am. J. Sci. ser.5, v.9, n.52, p.307, tf.2.<sup>†</sup>

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.221.<sup>†</sup>

HYPOTYPE YPM 14365<sup>††</sup>

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.221, pl.5, f.5.<sup>†††</sup>

Early Cambrian, Kinzers Fm. Noah L. Getz Farm, 1 mi N of Rohrerstown, Lancaster Co., Pennsylvania, USA. Collector: Getz, N.L.

<sup>†</sup>Incorrectly cited as YPM 14365.

<sup>††</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

<sup>†††</sup>Incorrectly cited as holotype and paratype.

***Olenoides gaspensis* Kindle**

SYNTYPE YPM 17080

Kindle, C.H. 1942. Am. J. Sci. ser.4, v.240, n.9, p.638, pl.1, f.18.

SYNTYPE YPM 17083

Kindle, C.H. 1942. Am. J. Sci. ser.4, v.240, n.9, p.638, pl.1, f.19.

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspé, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.



***Olenoides schucherti* Kindle**

SYNTYPE YPM 16044A

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.638, pl.1, f.20.<sup>†</sup>

SYNTYPE YPM 16044B

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.638, pl.1, f.21.

SYNTYPE YPM 17081A

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.638, pl.1, f.22,23.

SYNTYPE YPM 17081B

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.638, pl.1, f.24.

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspé, Quebec, Canada.  
Collector: Schuchert, C. and Cloud, P.E.

<sup>†</sup>The magnification for pl.1, f.20 is slightly greater than 1.5x, not 2x as stated in the plate explanation.

***Ommokris bassleri* (Ulrich and Delo)**

See *Dalmanites cf. D. vigilans* Hall.

***Onchometopus obtusus* (Hall)**

See *Isotelus obtusus* Hall.

***Onchonotus eminens* Raymond**

HOLOTYPE YPM 14712

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1095, pl.1, f.23,24.<sup>†</sup>

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

<sup>†</sup>This specimen was lost by a borrower in 1980. It is believed to be permanently lost.

***Onnia terryi* Leith**

See *Cryptolithus terryi* Leith.

***Pachycranium faciclunis* Ross**

HOLOTYPE YPM 18038

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.72, pl.16, f.23,24,29.

PARATYPE YPM 18039

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.72, pl.16, f.18,20,21.

PARATYPE YPM 18040

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.72, pl.16, f.19.

PARATYPE YPM 18041

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.72, pl.16, f.12,13,17.

PARATYPE YPM 18042

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.72, pl.16, f.22,28.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Pachycranium? sp.***

HYPOTYPE YPM 18051

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.73, pl.17, f.9,10,15.

HYPOTYPE YPM 18052

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.73, pl.17, f.6,14.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

HYPOTYPE YPM 18307

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.73, pl.17, f.4,5,11.

Early Ordovician, Garden City Fm, Zone C. 236 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side

of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Paciphacops logani* (Hall)**

HYPOTYPE YPM 6594

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, p.49, pl.12, f.2.<sup>†</sup>

Early Devonian, Helderberg Grp, New Scotland Limestone. Indian Ladder, Thatcher State Park, near New Salem, Albany Co., New York, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 20123

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, p.49, pl.8, f.5

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarkesville, Albany Co., New York, USA. Collector: Beecher, C.E., 1887.

HYPOTYPE YPM 20124

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, p.49, pl.13, f.3

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarkesville, Albany Co., New York, USA. Collector: Beecher, C.E., 1887.

HYPOTYPE YPM 20125

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, p.49, pl.12, f.4, pl.13, f.4.<sup>††</sup>

HYPOTYPE YPM 20126

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, p.49, pl.12, f.1.<sup>†</sup>

HYPOTYPE YPM 20127

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, p.49, pl.12, f.3.<sup>†</sup>

Early Devonian, Helderberg Grp, New Scotland Limestone. Indian Ladder, Thatcher State Park, near New Salem, Albany Co., New York, USA. Collector: Beecher, C.E.

HYPOTYPE YPM 31289-31299

Campbell, K.S.W. 1977. Bull. Okla. Geol. Surv. n.123, p.49

Early Devonian, Helderberg Grp, New Scotland Limestone. Clarkesville, Albany Co., New York, USA. Collector: Beecher, C.E., 1887.

<sup>†</sup>Incorrectly cited as YPM 6595.

***Paenebeltella vultulata* Ross**

HOLOTYPE YPM 18063

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.79, pl.18, f.1,2,5.

PARATYPE YPM 18064

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.79, pl.18, f.6.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Paenebeltella vultulata?* Ross**

HYPOTYPE YPM 18089

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.79, pl.19, f.10.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Paladin osagensis* Cisne**

HOLOTYPE YPM 24872

Cisne, J.L. 1967. J. Paleont. v.41, n.5, p.1268, tf.1A,C.

PARATYPE YPM 24873

Cisne, J.L. 1967. J. Paleont. v.41, n.5, p.1268, tf.1D, F.

Early Mississippian, Keokuk Limestone. Salem, Washington Co., Indiana, USA. Collector: Braun, F.

***Paladin rosei* Cisne**

HOLOTYPE YPM 24861

Cisne, J.L. 1967. J. Paleont. v.41, n.5,  
p.1270, tf.1G-I.

PARATYPE YPM 24862

Cisne, J.L. 1967. J. Paleont. v.41, n.5, p.1270.

PARATYPE YPM 24863

Cisne, J.L. 1967. J. Paleont. v.41, n.5,  
p.1270, tf.1J.

PARATYPE YPM 24864

Cisne, J.L. 1967. J. Paleont. v.41, n.5,  
p.1270, tf.1N.

PARATYPE YPM 24865-24868

Cisne, J.L. 1967. J. Paleont. v.41, n.5, p.1270.

PARATYPE YPM 24869

Cisne, J.L. 1967. J. Paleont. v.41, n.5,  
p.1270, tf.1K.

PARATYPE YPM 24870

Cisne, J.L. 1967. J. Paleont. v.41, n.5, p.1270.

Late Mississippian, Renault Limestone. Thin-bedded limestone, 0.5 mi SSW of Eichorn, Hardin Co., Illinois, USA. Collector: Cisne, J.L., 1961 to 1964.

PARATYPE YPM 24871

Cisne, J.L. 1967. J. Paleont. v.41, n.5,  
p.1270, tf.1L,M.

Late Mississippian. Breckenridge, Kentucky, USA. Collector: Fischer, M.

### ***Parabolinella occidentalis* Wilson**

HOLOTYPE YPM 18482

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.651, pl.95, f.3,4.

HYPOTYPE YPM 18479

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.651, pl.95, f.11.

Late Cambrian, Gatesburg Fm. Crystalline dark limestone, 105 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18480

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.651, pl.95, f.5.†

Late Cambrian, Gatesburg Fm. Crystalline dark limestone, 105 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18481

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.651, pl.95, f.2.

Late Cambrian, Gatesburg Fm. Dark platy limestone near top of member, 2 mi W of Woodbury, atop wooded ridge formed by Gatesburg Fm near old farm buildings and large sink, Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

†The cast, which is figured, is lost.

### ***Paracrevicephalus* cf. *P. thoosa* (Walcott)**

HYPOTYPE YPM 14714

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1097, pl.3, f.25.

=*Meteoraspis?* *minuta* (Raymond).

Hypotype. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.476, pl.57, f.11.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Sandy limestone at base of conglomerate, 3.5 mi N of St. Albans, 1 mi S of Rockledge, Franklin Co., Vermont, USA. Collector: Schuchert, C., Keith, A. and Prindle, ?.

### ***Paradoxides harlani* Green**

HYPOTYPE YPM 26760†

Green, Jacob. 1835. A supplement to the monograph of the trilobites of North America—with coloured models of the species, p.14.

Middle Cambrian. Braintree. Norfolk Co., Massachusetts, USA.

†This is a replica. The location of the actual specimen has not been determined.

### ***Parahystericurus carinatus* Ross**

HOLOTYPE YPM 18011

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60, pl.13, f.26,27,32.

PARATYPE YPM 18010



Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.60, pl.13, f.30,31,36.

PARATYPE YPM 18012

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.60, pl.13, f.23-25.

PARATYPE YPM 18013

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.60, pl.13, f.35,37.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Parahystericurus fraudator* Ross**

HOLOTYPE YPM 17988

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.58, pl.12, f.11,15,16.

PARATYPE YPM 17989

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.58, pl.12, f.8,13,14.

PARATYPE YPM 17990

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.58.

PARATYPE YPM 17991

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.58, pl.12, f.6,7,12.

PARATYPE YPM 17992

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.58, pl.12, f.1,2.

PARATYPE YPM 17993

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.58, pl.12, f.3-5.

PARATYPE YPM 17994

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.58, pl.12, f.9,10.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Parahystericurus oculirontundus* Ross**

HOLOTYPE YPM 18003

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.59, pl.12, f.44,48,49.

PARATYPE YPM 18004

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.59, pl.12, f.41,42,46.

PARATYPE YPM 18005

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.59, pl.12, f.36-38.

PARATYPE YPM 18006

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.59, pl.12, f.39-40.

PARATYPE YPM 18007

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.59, pl.12, f.33-35.

PARATYPE YPM 18008

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.59, pl.12, f.43-47.

PARATYPE YPM 18009

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.59, pl.12, f.45.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Parahystericurus pustulosus* Ross**

HOLOTYPE YPM 17995

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.60, pl.14, f.23,24,26.

PARATYPE YPM 17996

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60, pl.12, f.26,27,32.

PARATYPE YPM 17997

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60.

PARATYPE YPM 17998

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60, pl.12, f.17-19.

PARATYPE YPM 17999

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60, pl.12, f.20-22.

PARATYPE YPM 18000

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60, pl.12, f.23-25.

PARATYPE YPM 18001

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60, pl.12, f.28,29.

PARATYPE YPM 18002

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.60, pl.12, f.30,31.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### ***Parahystericurus* sp.**

HYPOTYPE YPM 18772

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.638, pl.63, f.31.

HYPOTYPE YPM 18773

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.638, pl.63, f.27.

Early Ordovician, Garden City Fm, Zone G(2). 609 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston,

Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

### ***Parahystericurus*? sp. A**

HYPOTYPE YPM 18027

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.61, pl.14, f.5,8,12.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***Parahystericurus*? sp. B**

HYPOTYPE YPM 18026

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.62, pl.14, f.4,6,7.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***Parahystericurus*? sp. C**

HYPOTYPE YPM 18186

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.62, pl.28, f.17,18,21.

HYPOTYPE YPM 18187

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.62, pl.28, f.22.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Paraphillipsia pahara* Weller**

SYNTYPE YPM 15026

Weller, J.M. 1935. Mem. Conn. Acad. Arts Sci. v.9,art.3, p.32, tf.2a,b.

Late Cambrian, East Arm Fm. SW of entrance to SE arm of Bonne Bay, Newfoundland, Canada. Collector: Johnson, H., 1945.

SYNTYPE YPM 15027A

Weller, J.M. 1935. Mem. Conn. Acad. Arts Sci. v.9,art.3, p.32, tf.1a,c.

SYNTYPE YPM 15027B

Weller, J.M. 1935. Mem. Conn. Acad. Arts Sci. v.9,art.3, p.32, tf.3a,b.

SYNTYPE YPM 26561

Weller, J.M. 1935. Mem. Conn. Acad. Arts Sci. v.9,art.3, p.32, tf.4a,b.

Permian. Reddish-grey coralline limestone, 26 ft thick, dipping 85SW, thrust block of Permian limestone in Changchenmo Valley, 7 mi upstream from hot spring of Kyam and 1 mi E of junction of Changchenmo and Silung in Tibet near border between Kashmir and Tibet, China. Collector: de Terra, H.

***Pedinodechenella modelli* Lieberman**

HOLOTYPE YPM 33762

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.115, tf.34.1-4.

Late Devonian, Ramparts or Beavertail Limestone. Ramparts of the Mackenzie River in Northern British Columbia, Canada. Collector: Sandersao, J.O.G., 8/19/1923.

***Peraspis lineolata* (Raymond)**

See *Niobe lineolata* Raymond.

***Periomma cloudi* Kindle**

HOLOTYPE YPM 17090

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.638, pl.2, f.2,3.†

PARATYPE YPM 17082

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.638, pl.2, f.1.†

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspe, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.

†The magnification for pl.2, f.2,3 is about 3x, not 4x as stated in the plate explanation.

***Perischoclonus capitalis* Raymond**

HOLOTYPE YPM 13049

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, p.159, pl.10, f.13.

Whittington, H.B. 1963. Bull. Mus. Comp. Zool. (Harvard Univ.) v.129, n.1, p.80, pl.22, f.1,3,5.

Middle Ordovician, Cow Head Grp. Bed 14, lower Table Head fossils from great limestone blocks, Lower Head, which is 3.5 mi N of Cow Head, western Newfoundland, Canada. Collector: Schuchert, C. and Dunbar, C.O., 8/4/1918.

***Phacops logani* Hall**

HYPOTYPE YPM 9677

Dunbar, C.O. 1919. Bull. Tenn. Geol. Surv. n.21, pl.2, f.18.

Early Devonian, Helderbergian, Linden Grp, Birdsong Shale. Swaynes Mill, Henry Co., Tennessee, USA. Collector: Pate, F.W.

***Phacops logani birdsongensis* Delo**

HOLOTYPE YPM 15192A

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.19, pl.1, f.13,15.

Eldredge, N. 1973. Bull. Am. Mus. Nat. Hist. v.151,art.4, p.296, tf.2a-c.

PARATYPE YPM 15348

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.19, pl.1, f.14.†

Eldredge, N. 1973. Bull. Am. Mus. Nat. Hist. v.151,art.4, p.296, tf.2e.††

HYPOTYPE YPM 15350†††

Eldredge, N. 1973. Bull. Am. Mus. Nat. Hist. v.151,art.4, p.296, tf.2d.††††

Early Devonian, Helderbergian, Linden Grp, Birdsong Shale. Swaynes Mill, Henry Co., Tennessee, USA. Collector: Pate, F.W.

†Incorrectly cited as YPM 15192.

††Incorrectly cited as YPM 15192B.

†††A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.



†††Incorrectly cited as YPM 15192.

***Phacops (Portlockia) marklandensis*  
McLearn**

SYNTYPE YPM 309

McLearn, F.H. 1918. Ottawa Nat. v.32,  
n.2, p.35.<sup>†</sup>

Lectotype. McLearn, F.H. 1924. Mem. Can.  
Geol. Surv. n.118, p.171, pl.28, f.2-4.††††

=*Eophacops marklandensis*. Delo, D.M.  
1940. Spec. Pap. Geol. Soc. Am. n.29,  
p.28, pl.2, f.5.††

=*Acernaspis?* *marklandensis*. Campbell,  
K.S.W. 1967. Bull. Okla. Geol. Surv.  
n.115, p.33.††

Early Silurian, Ross Brook Fm. Zone 2 of McLearn,  
SW of Arisaig Point, Arisaig, Antigonish Co., Nova  
Scotia, Canada. Collector: Twenhofel, W.H., 1908.

†A type series is not designated, but multiple  
specimens are referred to on p.35 under the  
headings "Collections."

††Incorrectly cited as [YPM] 483.

†††McLearn (1918) did not designate a holotype,  
but in 1924 designated a lectotype by inference  
of a holotype on p.171.

***Phacops orestes* Billings**

HYPOTYPE YPM 11313

Delo, D.M. 1940. Spec. Pap. Geol. Soc.  
Am. n.29, p.21, pl.1, f.22-24.<sup>†</sup>

=*Acernaspis orestes*. Campbell, K.S.W.  
1967. Bull. Okla. Geol. Surv. n.115, p.32,  
pl.12, f.1-3, pl.13, f.8.

HYPOTYPE YPM 24885

Campbell, K.S.W. 1967. Bull. Okla. Geol.  
Surv. n.115, p.32, pl.13, f.7.

Early Silurian, Llandovery, Jupiter Fm. W cliff,  
[mouth of] Iron River, Anticosti Island, Quebec,  
Canada. Collector: Twenhofel, W.H., 1909.

HYPOTYPE YPM 24886

Campbell, K.S.W. 1967. Bull. Okla. Geol.  
Surv. n.115, p.32.

HYPOTYPE YPM 24887

Campbell, K.S.W. 1967. Bull. Okla. Geol.  
Surv. n.115, p.32, pl.12, f.4,19.

Early Silurian, Llandovery, Jupiter Fm. West Jupiter  
Cliff, Anticosti Island, Quebec, Canada. Collector:  
Schuchert, C. and Twenhofel, W.H., 6/1908.

HYPOTYPE YPM 24888

Campbell, K.S.W. 1967. Bull. Okla. Geol.  
Surv. n.115, p.32.

Early Silurian, Llandovery, Gun River Fm. Wreck  
Beach, Anticosti Island, Quebec, Canada.  
Collector: Twenhofel, W.H., 1909.

HYPOTYPE YPM 24889

Delo, D.M. 1940. Spec. Pap. Geol. Soc.  
Am. n.29, p.21, pl.1, f.25.<sup>†</sup>

=*Acernaspis orestes*. Campbell, K.S.W.  
1967. Bull. Okla. Geol. Surv. n.115, p.32.

Early Silurian, Llandovery, Jupiter Fm. W cliff,  
[mouth of] Iron River, Anticosti Island, Quebec,  
Canada. Collector: Twenhofel, W.H., 1909.

†Incorrectly cited as 3063/93.

***Phacops rana* (Green)**

HYPOTYPE YPM 6622

Hall, J. and J.M. Clarke. 1888. Paleont.  
New York, v.7, p.19, pl.8A, f.25,26.

Middle Devonian, Hamilton Grp. Eighteen Mile  
Creek, Erie Co., New York, USA.

***Phacops* sp.**

HYPOTYPE YPM 13064

Northrop, S.A. 1939. Spec. Pap. Geol. Soc.  
Am. n.21, p.245.

Late Silurian, Ludlow, Bouleaux Fm. Base of  
Bouleaux, W side of McGinnis Cove, E of Port  
Daniel, Quebec, Canada. Collector: Schuchert, C.

***Phaethonides* sp.**

HYPOTYPE YPM 6610

Beecher, C.E. 1893a. Am. J. Sci. ser.3,  
v.46, p.144, pl.2, f.8-10.

=*Arges consanguineus* Clarke. Hypotype.  
Beecher, C.E. 1895c. Am. Geol. v.16,  
p.173, pl.9, f.4.

=*Corydocephalus consanguinensis*  
(Clarke). Hypotype. Stormer, Leif. 1942.  
Norsk Geol. Tidsskr. n.21, p.93, pl.1, f.40.

=undet. Lichidae. Whittington, H.B. 1956b.  
J. Paleont. v.30, p.1201, ff.1a,1b, pl.131, f.1-6.

Early Devonian, Helderberg Grp, New Scotland  
Limestone. Indian Ladder, Thatcher State Park,  
near New Salem, Albany Co., New York, USA.  
Collector: Beecher, C.E.

***Phalacroma cyclostigma* Raymond**

HOLOTYPE YPM 4747

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.397, pl.12, f.4.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.144, pl.12, f.4.

=*Litagnostus planulatus* (Raymond).  
Hypotype. Ludvigsen, Rolf and S.R. Westrop.  
1989. Paleont. Can. n.6, p.14, pl.3, f.2.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

***Phalacroma parilis* (Hall)**

HYPOTYPE YPM 4753

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.396, pl.12, f.8.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.143, pl.12, f.8.

=*Litagnostus raymondi* Shaw. Holotype.  
Shaw, A.B. 1951. J. Paleont. v.25, n.1,  
p.114, pl.24, f.6.

=*Litagnostus planulatus* (Raymond).  
Hypotype. Ludvigsen, Rolf and S.R. Westrop.  
1989. Paleont. Can. n.6, p.14, pl.3, f.3.

Late Cambrian, Gorge Fm. Franklin Co.,  
Vermont, USA. Collector: Schuchert, C. and  
Dunbar, C.O., 1923.

***Phoreotropis puteatis* Raymond**

HOLOTYPE YPM 4749

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.399, pl.12, f.12.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.146, pl.12, f.12.

Clark, M.G. and A.B. Shaw. 1968. J.  
Paleont. v.42, n.4, p.1014.

Ludvigsen, Rolf and S.R. Westrop. 1989.  
Paleont. Can. n.6, p.34, pl.22, f.11.

Late Cambrian, Gorge Fm. Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C. and Dunbar, C.O., 1923.

***Phoreotropis transversus* Raymond**

HOLOTYPE YPM 4709

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.400, pl.12, f.16.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.147, pl.12, f.16.

Ludvigsen, Rolf and S.R. Westrop. 1989.  
Paleont. Can. n.6, p.35, pl.22, f.16.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

***Phylacterus fraternus* Raymond**

HOLOTYPE YPM 4720

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.404, pl.12, f.19.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.150, pl.12, f.19.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

***Phylacterus saylesi* Raymond**

HOLOTYPE YPM 4752

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.403, pl.12, f.18.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.150, pl.12, f.18.

Clark, M.G. and A.B. Shaw. 1968. J.  
Paleont. v.42, n.4, p.1022.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

PARATYPE YPM 4751

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.404, pl.12, f.15.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.150, pl.12, f.15.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

HYPOTYPE YPM 4733

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.404, pl.12, f.14.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.150, pl.12, f.14.

Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1022.

=*Phylacterus* cf. *P. saylesi*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.56, pl.43, f.1.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

See also *Ambonolium liodernma* Raymond.

***Phylacterus* cf. *P. saylesi* Raymond**  
See *Phylacterus saylesi* Raymond.

***Pilekia eryx* (Billings)**

HYPOTYPE YPM 4761

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.458.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.197.

Early Ordovician, probably Highgate Fm. Lower part of formation, loc. 5, 4.5 mi N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Pilekia extenuata* Raymond**

SYNTYPE YPM 4735

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.457, pl.14, f.17.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.196, pl.14, f.17.

SYNTYPE YPM 24273

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.457, pl.14, f.20.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.196, pl.14, f.20.

Early Ordovician, Highgate Limestone. 2 mi N of Highgate Center, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Pilekia* sp.**

HYPOTYPE YPM 18285

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.125, pl.35, f.8-10.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Pinctus latus* Wilson**

HOLOTYPE YPM 18527

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.646, pl.93, f.1-3.

HYPOTYPE YPM 18523

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.646, pl.93, f.4.

Late Cambrian, Gatesburg Fm. Dark aphanitic limestone 72 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18525

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.646, pl.93, f.15.

Late Cambrian, Gatesburg Fm. Brownish trilobite coquina in pinkish intraformational conglomerate, 36 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Plataspella anatina* (Resser)**

HYPOTYPE YPM 18533

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.647, pl.92, f.6.

Late Cambrian, Gatesburg Fm. 57 ft above base of member, Drab, on slopes north of and in low road



cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Platycolpus dubius* (Billings)**

HYPOTYPE YPM 4734

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.447.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.187.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Platycolpus* sp.**

HYPOTYPE YPM 18202

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.121, pl.29, f.22,23,27.

=*Strigigenalis abdita* Ross. Holotype. Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671.

PARATYPE YPM 18203

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.121, pl.29, f.31.

=*Strigigenalis abdita* Ross. Paratype. Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671.

HYPOTYPE YPM 18204

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.121, pl.29, f.30,33,34.

=*Strigigenalis abdita* Ross. Paratype. Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671.

HYPOTYPE YPM 18205

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.121, pl.29, f.25,26.

=*Strigigenalis abdita* Ross. Paratype. Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671.

Early Ordovician, Garden City Fm, Zone G(2)a. 518 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18223

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.121, pl.29, f.28,29,32.

=*Strigigenalis abdita* Ross. Paratype. Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Platydiamesus depressus* Raymond**

HOLOTYPE YPM 14735

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1109, pl.2, f.20.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Platydiamesus inornatus* (Raymond)**

HYPOTYPE YPM 14737A

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1110, pl.2, f.18.

Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1020.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.38, pl.26, f.2.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

See also *Asaphiscus inornatus* Raymond.

***Platydiamesus inornatus?* (Raymond)**

HYPOTYPE YPM 14737B

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1110, pl.2, f.19.

Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1021.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Platydiamesus subtilis* Raymond**

HOLOTYPE YPM 14736

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1110, pl.2, f.21.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Plethometopus knopfi* Lochman**

HOLOTYPE YPM 17394

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.551, pl.1, f.8.9.

PARATYPE YPM 17395A

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.551.

PARATYPE YPM 17395B

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.551, pl.1, f.7.

Late Cambrian, Franconian, Hoyt Dol. Small patch of fossiliferous dolomite about 4 ft above road surface in prominent outcrop on E side of NY Hwy 82A, 300 ft N of entrance to Briarcliff Farm, and 1.75 mi due S of village of Pine Plains, Dutchess Co., New York, USA. Collector: Knopf, A., 1945.

***Plethopeltis angusta* Raymond**

HOLOTYPE YPM 4757

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.417, pl.13, f.4,8.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.162, pl.13, f.4,8.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Plethopeltis armata* (Billings)**

HYPOTYPE YPM 4738

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.416.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.161.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Plethopeltis convergens* Raymond**

HOLOTYPE YPM 4703

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.419, pl.13, f.2.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.164, pl.13, f.2.

=*Stenopilus convergens*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.59, pl.48, f.15.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Plethopeltis incisa* Raymond**

HOLOTYPE YPM 14715

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1097.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Plethopeltis laevis* Raymond**

HOLOTYPE YPM 4721

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.417, pl.13, f.3.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.162, pl.13, f.3.

=*Acheilus laevis*. Ludvigsen, Rolf. 1986. J. Paleont. v.60, n.1, p.63, f.1-3,4.

=*Acheilus laevis*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.49, pl.37, f.4-9.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Plethopeltis lata* Raymond**

HOLOTYPE YPM 4708

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.418, pl.13, f.5.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.163, pl.13, f.5.

=*Stenopilus elongatus* Rasetti. Hypotype.  
Rasetti, Franco. 1945. *Naturaliste Canadien*  
v.72, n.5-6, p.122.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

***Pliomeroops canadensis* Billings**

See *Amphion canadensis* Billings.

***Portlockia primaeva* (Clarke)**

HYPOTYPE YPM 12885

Cooper, G.A. 1930. *Am. J. Sci.* ser.5,v.20,  
n.119, p.386

HYPOTYPE YPM 13370

Cooper, G.A. 1930. *Am. J. Sci.* ser.5,v.20,  
n.119, p.385, tf.6, pl.5, f.3.†

=*Eophacops primaevus*. Delo, D.M. 1940.  
Spec. Pap. Geol. Soc. Am. n.29, p.28,  
pl.2, f.11.†

=*Acernaspis (Acernaspis) primaeva*.  
Lesperance, P.J. and Jacques Letendre.  
1981. Subcom. Sil. Strat. v.2, p.200.††

HYPOTYPE YPM 13371

Cooper, G.A. 1930. *Am. J. Sci.* ser.5,v.20,  
n.119, p.385, pl.5, f.2.†

=*Eophacops primaevus*. Delo, D.M. 1940.  
Spec. Pap. Geol. Soc. Am. n.29, p.28, pl.2, f.13.

=*Acernaspis (Acernaspis) primaeva*.  
Lesperance, P.J. and Jacques Letendre.  
1981. Subcom. Sil. Strat. v.2, p.200.††

HYPOTYPE YPM 13372

Cooper, G.A. 1930. *Am. J. Sci.* ser.5,v.20,  
n.119, p.385, pl.5, f.4.†

=*Eophacops primaevus*. Delo, D.M. 1940.  
Spec. Pap. Geol. Soc. Am. n.29, p.28, pl.2, f.12.

=*Acernaspis (Acernaspis) primaeva*.  
Lesperance, P.J. and Jacques Letendre.  
1981. Subcom. Sil. Strat. v.2, p.200.††

HYPOTYPE YPM 13373

Cooper, G.A. 1930. *Am. J. Sci.* ser.5,v.20,  
n.119, p.385.†

=*Eophacops primaevus*. Delo, D.M. 1940.  
Spec. Pap. Geol. Soc. Am. n.29, p.28.†

HYPOTYPE YPM 31266

Cooper, G.A. 1930. *Am. J. Sci.* ser.5,v.20,  
n.119, p.385, pl.5, f.1.†

=*Eophacops primaevus*. Delo, D.M. 1940.  
Spec. Pap. Geol. Soc. Am. n.29, p.28.†

=*Acernaspis (Acernaspis) primaeva*.  
Lesperance, P.J. and Jacques Letendre.  
1981. Subcom. Sil. Strat. v.2, p.200.††

Late Ordovician, Whitehead Fm. Cape Blanc, SW of  
Perce, Gaspé Peninsula, Quebec, Canada. Collector:  
Northrop, S.A. and Schuchert, C., 8/1927.

†Cited as YPM 12885.

††Incorrectly cited as YPM 1225a to 1225d.

***Primaspis crosotus* (Locke)**

See *Acidaspis trentonensis* Walcott.

***Probolium tridens* Hall**

See *Dalamites (Probolium) tidens* Hall.

***Proetus acutiliratus* Northrop**

HOLOTYPE YPM 13359

Northrop, S.A. 1939. Spec. Pap. Geol. Soc.  
Am. n.21, p.233, pl.26, f.11

Early Silurian, Llandovery, West Point Fm. At  
lighthouse, West Point, Quebec, Canada.  
Collector: Northrop, S.A., 1927.

***Proetus beecheri* Ruedemann**

HOLOTYPE YPM 20218

Ruedemann, Rudolf. 1926. Bull. N.Y. St.  
Mus. n.272, p.128, pl.22, f.13.†

PARATYPE YPM 20217

Ruedemann, Rudolf. 1926. Bull. N.Y. St.  
Mus. n.272, p.128, pl.22, f.12.†

PARATYPE YPM 20219

Ruedemann, Rudolf. 1926. Bull. N.Y. St.  
Mus. n.272, p.128, pl.22, f.14.†

PARATYPE YPM 27834-27837

Ruedemann, Rudolf. 1926. Bull. N.Y. St.  
Mus. n.272, p.128.††



Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Luther, D.D., 5/1894.

See also *Proetus parviusculus* Hall.

<sup>†</sup>Cited as "the material consists of ten specimens," but only eight (including two parts and counterparts) are present.

<sup>††</sup>Cited as "the material consists of ten specimens," but four of these appear to be part and counterpart of these two individuals (YPM 27834 and 27837).

### ***Proetus corrugatus* Van Ingen**

HYPOTYPE YPM 26125

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.10, pl.1, f.11.

=*Decoroproetus corycoeus* (Conrad).

Hypotype. Holloway, D.J. 1980.

Palaeontogr. Abt. A, bd.170, p.15.

HYPOTYPE YPM 26126

Thomas, N.L. 1929a. Bull. Denison Univ. Sci. Lab. v.24, p.10, pl.1, f.12.

=*Decoroproetus corycoeus* (Conrad).

Hypotype. Holloway, D.J. 1980.

Palaeontogr. Abt. A, bd.170, p.15.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

### ***Proetus latifrons* (McCoy)**

HYPOTYPE YPM 33801-33803

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.22.

HYPOTYPE YPM 33804

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.22, ff.7.3-5.

HYPOTYPE YPM 33805

Lieberman, B.S. 1994. Bull. Am. Mus. Nat. Hist. n.223, p.22, ff.7.1-2.

Late Silurian. Wenlock, Coalbrookdale Fm. Dudley, England, United Kingdom.

### ***Proetus pachydermatus* Barrett**

HYPOTYPE YPM 26719

Ohern, D.W. and T.P. Maynard. 1913. Maryland Geol. Surv. p.490, pl.89, f.1.

Early Devonian, Keyser Limestone. Cumberland. Allegany Co., Maryland, USA. Collector: Roeder, G.M.

### ***Proetus parviusculus* Hall**

HYPOTYPE YPM 6609

Beecher, C.E. 1895c. Am. Geol. v.16, p.173, pl.9, f.5.

=*Proetus beecheri* Ruedemann. Hypotype.

Ruedemann, Rudolf. 1926. Bull. N.Y. St. Mus. n.272, p.128

Stormer, Leif. 1942. Norsk Geol. Tidsskr. n.21, p.91.

=*Protaspis* B. Whittington, H.B. 1957. J. Paleont. v.31, p.944, pl.115, f.10,15.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

HYPOTYPE YPM 6671

Beecher, C.E. 1895c. Am. Geol. v.16, p.173, pl.9, f.6.

=*Proetus beecheri* Ruedemann. Hypotype.

Ruedemann, Rudolf. 1926. Bull. N.Y. St. Mus. n.272, p.128

Stormer, Leif. 1942. Norsk Geol. Tidsskr. n.21, p.91, pl.1, f.34.

=undet. Trilobita. Whittington, H.B. 1957. J. Paleont. v.31, p.945, pl.115, f.20.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

### ***Proetus rowi* (Green)**

HYPOTYPE YPM 26160

Hall, J. and J.M. Clarke. 1888. Paleont. New York, v.7, p.119, pl.23, f.21.

Middle Devonian, Hamilton Grp. Shore of Lake Erie, Hamburg, Erie Co., New York, USA.

See also *Proetus rowii* (Green).

***Proetus rowii* (Green)<sup>†</sup>**

HYPOTYPE YPM 6623

Hall, J. 1876. Illustrations of Devonian fossils: gasteropoda, pteropoda, cephalopoda, crustacea and corals of the Upper Helderberg, Hamilton and Chemung Groups, pl.21, f.6.

=*Proetus rowi* (Green). Hall, J. and J.M. Clarke. 1888. Paleont. New York, v.7, p.119, pl.21, f.6.

Middle Devonian, Hamilton Grp. Shore of Lake Erie, Hamburg, Erie Co., New York, USA.

<sup>†</sup>The specific name is spelled incorrectly. The correct spelling is *rowi*.

***Proetus* sp.**

See *Proetus parviusculus* Hall.

***Proetus turgidus* Northrop**

SYNTYPE YPM 13360

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.233.

SYNTYPE YPM 30869

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.233, pl.26, f.8.

SYNTYPE YPM 30870

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.233, pl.26, f.9.

SYNTYPE YPM 30871

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.233.

Early Silurian, Llandovery, West Point Fm. Lower pink limestone, Reddish Point W of Gascons, Quebec, Canada. Collector: Schuchert, C., 8/1923.

***Proetus* cf. *turgidus* Northrop**

HYPOTYPE YPM 14861

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.233, pl.26, f.10.

HYPOTYPE YPM 30872

Northrop, S.A. 1939. Spec. Pap. Geol. Soc. Am. n.21, p.233.

Early Silurian, Llandovery, West Point Fm. Lower pink limestone, Reddish Point W of Gascons, Quebec, Canada. Collector: Schuchert, C., 8/1923.

***Prosaukia briarcliffensis* Lochman**

HOLOTYPE YPM 17391

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.549, pl.1, f.1,4.

PARATYPE YPM 17392

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.549, pl.1, f.5,6.

PARATYPE YPM 17393A

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.549, pl.1, f.3.

PARATYPE YPM 17393B

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.549, pl.1, f.2.

PARATYPE YPM 17393C

Lochman, C. 1946. Am. J. Sci. v.244, n.8, p.549.

Late Cambrian, Franconian, Hoyt Dol. Small patch of fossiliferous dolomite about 4 ft above road surface in prominent outcrop on E side of NY Hwy 82A, 300 ft N of entrance to Briarcliff Farm, and 1.75 mi due S of village of Pine Plains, Dutchess Co., New York, USA. Collector: Knopf, A., 1945.

***Prosaukia irrasa* Raymond**

See *Stenosaukia irrasa* Raymond.

***Protapatokephalus arctostriatus* Raymond**

HOLOTYPE YPM 14701A

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1085, pl.1, f.4.

=*Richardsonella arctostriata*. Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1020.

=*Richardsonella arctostriata*. Ludvigsen, Rolf. 1982. Contrib. Roy. Ont. Mus. n.134, ff.70-N.

PARATYPE YPM 14701B

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1085, pl.1, f.5.

PARATYPE YPM 14701C

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1085, pl.1, f.7.

=*Richardsonella arctostriata*. Ludvigsen, Rolf. 1982. Contrib. Roy. Ont. Mus. n.134, ff.70-0.

PARATYPE YPM 14701D

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1085.

=*Protapatokephalus pauper* (Billings). Hypotype. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.42, pl.30, f.4.

PARATYPE YPM 14702

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1085, pl.1, f.6.

=*Richardsonella arctostriata*. Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1020.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Protapatokephalus granulatus* Raymond**

HOLOTYPE YPM 14703

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1085, pl.1, f.9.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Protapatokephalus minutus* Raymond**

See *Hungaia minuta* Raymond.

***Protapatokephalus pauper* (Billings)**  
See *Protapatokephalus arctostriatus* Raymond.

***Protapatokephalus spiculatus* Raymond**

HOLOTYPE YPM 14704

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1085, pl.1, f.8.

Ludvigsen, Rolf. 1982. Contrib. Roy. Ont. Mus. n.134, ff.70-Q.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Protillanenus marginatus* Raymond**

See *Maryvillia triangularis* Raymond.

***Protopliomerella contracta* (Ross)**

See *Protopliomerops contracta* Ross.

***Protopliomerops celsaora* Ross**

HOLOTYPE YPM 18258

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.31, f.3,4,9.

=*Hintzeia celsaora*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

Ordovician, Garden City Fm. 495 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18257

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.31, f.1,2,5.

=*Hintzeia celsaora*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18264

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.34, f.12.

=*Hintzeia celsaora*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18265

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.34, f.9-11,20.

=*Hintzeia celsaora*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18324

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.35, f.29.

=*Hintzeia celsaora*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

Early Ordovician, Garden City Fm, Zone G(1). Float and in place about 300 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and



slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

***Protopliomerops contracta* Ross**

HOLOTYPE YPM 18253

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.17,22.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

Ordovician, Garden City Fm. 495 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18246

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.27,31,32.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18247

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.18,19.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18248

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.24,28,29.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18249

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.23.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18250

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.26.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18251

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.25.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

Early Ordovician, Garden City Fm, Zone G(2)c. 558 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18252

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.16.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

Early Ordovician, Garden City Fm, Zone G(2)e. 704-786 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946.

PARATYPE YPM 18255

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.15.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18256

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.136, pl.33, f.30.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

Early Ordovician, Garden City Fm, Zone G(2)d. 655 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston,

Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18259

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.31, f.6-8.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18260

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.31, f.12.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18261

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.31, f.10,11.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18262

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.31, f.13.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

PARATYPE YPM 18263

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.135, pl.31, f.14,15.

=*Protopliomerella contracta*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.811.

Ordovician, Garden City Fm. 495 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Protopliomerops superciliosa* Ross**

HOLOTYPE YPM 18266

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.31, f.16,20,24.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18267

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.31, f.19,23.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18268

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18269

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.31, f.25,26.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18270

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.31, f.22.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18271

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.31, f.21.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18272

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.31, f.18.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18273

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.31, f.17.

=*Rossaspis superciliosa*. Harrington, H.J. 1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18274

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.133, pl.34, f.5-7,19.

=*Rossaspis superciliosa*. Harrington, H.J.  
1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 18275

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.133, pl.34, f.8.

=*Rossaspis superciliosa*. Harrington, H.J.  
1957. J. Paleont. v.31, n.4, p.812.

PARATYPE YPM 50113-50145

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.133.

=*Rossaspis superciliosa*. Harrington, H.J.  
1957. J. Paleont. v.31, n.4, p.812.

HYPOTYPE YPM 50045<sup>†</sup>

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.134, pl.32, f.1.

Hupe, P. 1953. Ann. Paleont.v.39, p.126, ff.90.

=*Rossaspis superciliosa*. Harrington, H.J.  
1957. J. Paleont. v.31, n.4, p.812.

Early Ordovician, Garden City Fm, Zone F. 357-  
372 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1947.

<sup>†</sup>A thorough search by the curatorial staff in the  
1960s and 1990s could not locate this specimen.  
It is believed to be permanently lost.

### ***Prozacanthoides gaspensis* Kindle**

SYNTYPE YPM 17084

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240,  
n.9, p.639, pl.2, f.6.<sup>†</sup>

SYNTYPE YPM 17085

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240,  
n.9, p.639, pl.2, f.7.<sup>†</sup>

SYNTYPE YPM 17086

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240,  
n.9, p.639, pl.2, f.5.<sup>†</sup>

Cambrian, Corner-of-the-Beach Fm. W of Corner-  
of-the-Beach, Gaspé, Quebec, Canada.  
Collector: Schuchert, C. and Cloud, P.E.

<sup>†</sup>The magnification for pl.2, f.5 is about 3x, not 4x  
as stated in the plate explanation.

### ***Psalikilopsis cuspidicauda* Ross**

HOLOTYPE YPM 18774

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.639, pl.63, f.4,5,9.

PARATYPE YPM 18775

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.639, pl.63, f.8.

PARATYPE YPM 18776

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.639,640, pl.63, f.3.

Early Ordovician, Garden City Fm, Zone G(2)a.  
498 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1949.

PARATYPE YPM 18777

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.639, pl.63, f.2,6,7.

PARATYPE YPM 18778

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.639, pl.63, f.12.

Early Ordovician, Garden City Fm, Zone G(2).  
521 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1949.

### ***Psalikilus?* sp.**

HYPOTYPE YPM 18023

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.63, pl.13, f.28,29,33.

HYPOTYPE YPM 18024

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.63, pl.13, f.34.

HYPOTYPE YPM 18206

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.63, pl.30, f.1-3.



Early Ordovician, Garden City Fm, Zone G(2)a. Float, about 500 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

***Psalikilus typicum* Ross**

HOLOTYPE YPM 17985

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.62, pl.11, f.2-5.

PARATYPE YPM 17984

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.62, pl.11, f.1.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 17986

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.62, pl.11, f.9,13,14.

PARATYPE YPM 17987

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.62, pl.11, f.8,19.

Early Ordovician, Garden City Fm, Zone G(2)c. 558 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Pseudagnostus extumidus* Raymond**

HOLOTYPE YPM 4744

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.394, pl.12, f.7.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.141, pl.12, f.7.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Pseudoclelandia cornupsittica* Ross**

HOLOTYPE YPM 18199

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.119, pl.29, f.11,13,19.

PARATYPE YPM 18200

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.119, pl.29, f.12,16.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Pseudoclelandia fluxifissurina* Ross**

HOLOTYPE YPM 18198

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.119, pl.29, f.14,17,18.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Pseudoclelandia lenisora* Ross**

HOLOTYPE YPM 18197

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.120, pl.29, f.5,10,15.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Pseudocybele nasuta* Ross**

HOLOTYPE YPM 18235

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.33, f.4.

PARATYPE YPM 18234

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.33, f.9-11.

PARATYPE YPM 18236

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.33, f.1,2,5.

PARATYPE YPM 18237

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.33, f.13.

PARATYPE YPM 18238

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.33, f.3,6-8,12.

PARATYPE YPM 18239

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.33, f.14.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18240

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18241

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.34, f.24,26.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage

Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18242

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138.

Early Ordovician, Garden City Fm, Zone J. 131-135 ft below top of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18243

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.34, f.21-23.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18244

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.34, f.15,17.

PARATYPE YPM 18245

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.34, f.13,14,16.

Early Ordovician, Garden City Fm, Zone J. About 351 ft below top of Garden City, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18332

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.138, pl.34, f.27.

Early Ordovician, Garden City Fm, Zone J. 131-135 ft below top of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation

of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE    YPM 18381

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.138, pl.34, f.25.

Early Ordovician, Garden City Fm, Zone J. 1485-1520 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE    YPM 18399

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.1.

HYPOTYPE    YPM 18400

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.2.

HYPOTYPE    YPM 18701

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.3.<sup>†</sup>

HYPOTYPE    YPM 18702

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.4.<sup>††</sup>

HYPOTYPE    YPM 18703

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.5.<sup>†††</sup>

HYPOTYPE    YPM 18704

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.6.<sup>††††</sup>

HYPOTYPE    YPM 18705

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.7.<sup>†††††</sup>

HYPOTYPE    YPM 18706

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.8.<sup>††††††</sup>

HYPOTYPE    YPM 18707

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.9.<sup>†††††††</sup>

HYPOTYPE    YPM 18708

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.10,11.<sup>††††††††</sup>

HYPOTYPE    YPM 18709

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.12.<sup>†††††††††</sup>

HYPOTYPE    YPM 18710

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.13.<sup>††††††††††</sup>

HYPOTYPE    YPM 18711

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.14.<sup>†††††††††††</sup>

HYPOTYPE    YPM 18712

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.82, f.15.<sup>††††††††††††</sup>

HYPOTYPE    YPM 18713

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.1.<sup>††††††††††††</sup>

HYPOTYPE    YPM 18714

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.3.<sup>†††††††††††††</sup>

HYPOTYPE    YPM 18715

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.4.<sup>††††††††††††††</sup>

HYPOTYPE    YPM 18716

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.2.<sup>†††††††††††††††</sup>

HYPOTYPE    YPM 18717

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.5.<sup>††††††††††††††††</sup>

HYPOTYPE    YPM 18718

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.6.<sup>††††††††††††††††</sup>

HYPOTYPE    YPM 18719

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.583, pl.83, f.7.<sup>†††††††††††††††††</sup>



## HYPOTYPE YPM 18720

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.583, pl.83, f.8.+++++

## HYPOTYPE YPM 18721

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.583, pl.83, f.9.+++++

## HYPOTYPE YPM 18722

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.583, pl.83, f.10.+++++

## HYPOTYPE YPM 18723

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.583, pl.83, f.11.+++++

## HYPOTYPE YPM 18724

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5,  
p.583, pl.83, f.12.+++++

Early Ordovician, Garden City Fm, Zone J. 265-  
350 ft below top of Garden City, measured  
section down from near base of Swan Peak into  
Garden City, small knoll on NE side of Round Hill,  
1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan  
Quad., SE sec10T9NR1W, Box Elder Co., Utah,  
USA. Collector: Ross, R.J., Jr., 1949.

†Not 18401 as published in the explanation for  
pl.82, f.3.

††Not 18402 as published in the explanation for  
pl.82, f.4.

†††Not 18403 as published in the explanation for  
pl.82, f.5.

††††Not 18404 as published in the explanation for  
pl.82, f.6.

†††††Not 18405 as published in the explanation for  
pl.82, f.7.

††††††Not 18406 as published in the explanation  
for pl.82, f.8.

†††††††Not 18407 as published in the explanation  
for pl.82, f.9.

††††††††Not 18408 as published in the explanation  
for pl.82, f.10,11.

†††††††††Not 18409 as published in the explanation  
for pl.82, f.12.

††††††††††Not 18410 as published in the  
explanation for pl.82, f.13.

††††††††††Not 18411 as published in the  
explanation for pl.82, f.14.

††††††††††Not 18412 as published in the  
explanation for pl.82, f.15.

†††††††††††Not 18413 as published in the  
explanation for pl.83, f.1.

††††††††††††Not 18414 as published in the  
explanation for pl.83, f.3.

†††††††††††††Not 18415 as published in the  
explanation for pl.83, f.4.

††††††††††††††Not 18416 as published in the  
explanation for pl.83, f.2.

†††††††††††††††Not 18417 as published in the  
explanation for pl.83, f.5.

††††††††††††††††Not 18418 as published in the  
explanation for pl.83, f.6.

†††††††††††††††††Not 18419 as published in the  
explanation for pl.83, f.7.

††††††††††††††††††Not 18420 as published in the  
explanation for pl.83, f.8.

†††††††††††††††††††Not 18421 as published in the  
explanation for pl.83, f.9.

††††††††††††††††††††Not 18422 as published in the  
explanation for pl.83, f.10.

†††††††††††††††††††††Not 18423 as published in  
the explanation for pl.83, f.11.

††††††††††††††††††††††Not 18424 as published in  
the explanation for pl.83, f.12.

***Pseudohystericurus obesus* Ross**

## HOLOTYPE YPM 18049

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.74, pl.16, f.25,30,34.

## PARATYPE YPM 18048

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.74.

## HOLOTYPE YPM 18779

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.640, pl.63, f.10,15,16.

Ordovician, Garden City Fm. 480 ft above base of  
Garden City, measured section up from base of  
Garden City southward along ridge top on W side  
of Hillyard's Canyon, Bear River Range, and  
about 11 mi E of Preston, Preston Quad., W

sec23T15SR41E, Franklin Co., Idaho, USA.  
Collector: Ross, R.J., Jr., 1949.

***Pseudohystericurus orbus* Ross**

PARATYPE YPM 18780

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.640, pl.63, f.11,17-20.

PARATYPE YPM 18781

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.640, pl.63, f.17-20.

PARATYPE YPM 18782

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.640, pl.63, f.13.

PARATYPE YPM 18783

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5,  
p.640, pl.63, f.14.

HOLOTYPE YPM 18301

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.75, pl.16, f.32,33,37.

PARATYPE YPM 18304

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.75, pl.16, f.35.

PARATYPE YPM 18305

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.75, pl.16, f.36.

Early Ordovician, Garden City Fm, Zone A. 32-35  
ft above base of Garden City, northeast (N45E)  
along 0.5 mi long measured section starting  
along road at bottom of Hillyard's Canyon at a  
point 0.8 mi N of S end of canyon at an elevation  
of 7200 ft, and ending near top of ridge on E side  
of canyon, Bear River Range, and about 12 mi E  
of Preston, Preston Quad., E NE sec23T15SR41E,  
W NW sec24T15SR41E, Franklin Co., Idaho, USA.  
Collector: Ross, R.J., Jr., 1947.

***Pseudohystericurus* sp.**

HYPOTYPE YPM 18050

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.75, pl.16, f.26,27,31.

Early Ordovician, Garden City Fm, Zone E. 413 ft  
(313 ft in Ross notebook) above base of Garden  
City, northeast (N45E) along 0.5 mi long measured

section starting along road at bottom of Hillyard's  
Canyon at a point 0.8 mi N of S end of canyon at an  
elevation of 7200 ft, and ending near top of ridge on E  
side of canyon, Bear River Range, and about 12 mi  
E of Preston, Preston Quad., E NE sec23T15SR41E,  
W NW sec24T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1947.

***Pseudomera*? sp.**

HYPOTYPE YPM 18254

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.33, f.20,21.

Early Ordovician, Garden City Fm, Zone G(2)e.  
704-786 ft above base of Garden City, northeast  
(N45E) along 0.5 mi long measured section starting  
along road at bottom of Hillyard's Canyon at a point  
0.8 mi N of S end of canyon at an elevation of 7200  
ft, and ending near top of ridge on E side of  
canyon, Bear River Range, and about 12 mi E of  
Preston, Preston Quad., E NE sec23T15SR41E,  
W NW sec24T15SR41E, Franklin Co., Idaho,  
USA. Collector: Ross, R.J., Jr., 1946.

***Pseudophillipsia*? sp.**

HYPOTYPE YPM 15028

Weller, J.M. 1935. Mem. Conn. Acad. Arts  
Sci. v.9, art.3, p.34, tf.6a,c.

Permian. Reddish-grey coralline limestone, 26 ft thick,  
dipping 85SW, thrust block of Permian limestone in  
Changchenmo Valley, 7 mi upstream from hot  
spring of Kyam and 1 mi E of junction of Chang-  
chenmo and Silung in Tibet near border between  
Kashmir and Tibet, China. Collector: de Terra, H.

***Pseudosalteria laevis* Raymond**

HOLOTYPE YPM 4742

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.398, pl.12, f.11.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.145, pl.12, f.11.

Late Cambrian, Gorge Fm. Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C. and Dunbar, C.O., 1923.

***Pseudosaratogia bulbosa* Wilson**

HOLOTYPE YPM 18589

Wilson, J.L. 1951. J. Paleont. v.25, n.5,  
p.649, pl.94, f.17,18.

Late Cambrian, Gatesburg Fm. Dark aphanitic limestone 72 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Pseudosaratogia lata* Wilson**

HOLOTYPE YPM 18598

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.19,20.

Late Cambrian, Gatesburg Fm. Gray crystalline trilobite coquina and pinkish intraformational conglomerate 48 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18588

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.21.

Late Cambrian, Gatesburg Fm. Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Pseudosaratogia magna* Wilson**

HOLOTYPE YPM 18444

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.16.

Late Cambrian, Conococheague Limestone. Massive crystalline limestone 106 ft above basal sandy member, 0.5 mi SW of Cushwa Mill, S of branch of Rockdale Creek, S of several farmhouses N of creek, Williamsport Quad., Washington Co., Maryland, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18435

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.12.

Late Cambrian, Conococheague Limestone. Dark medium-bedded oolitic limestone and dolomite, 252 ft above basal sandy member, on low hill 0.5 mi W of Winchester, VA city center, at city limits on US Hwy 50 to S of highway and W of old Glen Burnie estate, Frederick Co., Virginia, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18437

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.13,14.

HYPOTYPE YPM 18439

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.10.

Late Cambrian, Conococheague Limestone. Massive crystalline limestone 106 ft above basal sandy member, 0.5 mi SW of Cushwa Mill, S of branch of Rockdale Creek, S of several farmhouses N of creek, Williamsport Quad., Washington Co., Maryland, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18440

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.9.

Late Cambrian, Gatesburg Fm. Dark massive, crystalline limestone, 11 ft above base of Ore Hill Mbr, Flucht-Eschelmann quarries, on and S of county road connecting Lafayetteville with PA Hwy 868, in quarry owned by Snowburger across road from Eschelmann farmhouse, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18445

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.648, pl.94, f.11.

Late Cambrian, Conococheague Limestone. Massive crystalline limestone 106 ft above basal sandy member, 0.5 mi SW of Cushwa Mill, S of branch of Rockdale Creek, S of several farmhouses N of creek, Williamsport Quad., Washington Co., Maryland, USA. Collector: Wilson, J.L.

***Pseudosphaerexochus approximatus* Raymond**

HOLOTYPE YPM 23300

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.243, pl.36, f.18.

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.369, pl.14, f.18.

Middle Ordovician, Crown Point Limestone. Middle to upper part of formation, Sloop Bay, ledges near water in center of bay shore in dark gray, hard limestone with much pyrite, Shaw (1968) loc. V114, Valcour Island, Lake Champlain, Clinton Co., New York, USA.



***Pterocephalina sanctisabae* Roemer**

HYPOTYPE YPM 18559

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.647, pl.91, f.24.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Ptychaspis affinis* Raymond**

HOLOTYPE YPM 4705

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.450, pl.14, f.6.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.190, pl.14, f.6.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Ptychoparella (?) gaspensis* Kindle**

HOLOTYPE YPM 17077

Kindle, C.H. 1942. Am. J. Sci. ser.4, v.240, n.9, p.639, pl.2, f.9 and 10.

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspé, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.

***Ptychoparella (?) murphyi* Kindle**

HOLOTYPE YPM 17076

Kindle, C.H. 1942. Am. J. Sci. ser.4, v.240, n.9, p.640, pl.2, f.12.

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspé, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.

***Ptychoparia? convexa* Howell**

PARATYPE YPM 13412B

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1183.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13427 13428

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1183.

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13429

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1183.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13430 13431 13437D

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1183.

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Ptychoparia kingi* Meek and Worthen**

HYPOTYPE YPM 6601

Beecher, C.E. 1895c. Am. Geol. v.16, p.171, pl.8, f.5.<sup>†</sup>

HYPOTYPE YPM 6612

Beecher, C.E. 1895c. Am. Geol. v.16, p.171, pl.8, f.6.

HYPOTYPE YPM 30550

Middle Cambrian. SE Nevada, USA.

<sup>†</sup>Collection data implies YPM 06601 and 30550 served as the basis for pl.8, f.5.

***Ptychopleurites dunbari* Raymond**

See *Aposolenopleura dunbari* Raymond.

***Ptychopleurites ornata* Raymond**

See *Punctularia ornata* Raymond.

***Punctularia ornata* Raymond**

HOLOTYPE YPM 14758

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1124, pl.3, f.21.

= *Ptychopleurites ornata*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, pl.21, f.7.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Pyraustocranium orbatum* Ross**

HOLOTYPE YPM 18072

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.80, pl.18, f.3,4,7,8.

PARATYPE YPM 18065, 18066

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.80.

PARATYPE YPM 18067

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.80, pl.18, f.12-14.

PARATYPE YPM 18068

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.80.

PARATYPE YPM 18069

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.80, pl.18, f.11.

PARATYPE YPM 18070

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.80.

PARATYPE YPM 18071

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.80, pl.18, f.10,16.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

***Rananasus conicus* Cullison**

PARATYPE YPM 17418

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.82.<sup>†</sup>

PARATYPE YPM 17419

Cullison, J.S. 1944. Bull. Tech. Ser. Missouri Univ. Sch. Mines Met. v.15, n.2, p.82.<sup>†</sup>

Early Ordovician, Jefferson City Grp, Rich Fountain Fm. Chert, above School Mine ledge, at elevation 1048 ft, along slope above road at corner, elevation 1053 ft, and south on side road, Meramec Springs quadrangle, E1/2SE1/4SE1/4SW1/4sec21,T37N,R07W, Phelps Co., Missouri, USA. Collector: Cullison, J.S.

<sup>†</sup>Not 17192 as published on p.82.

***Raphiophorus semicostatus* (Billings)**

HYPOTYPE YPM 13035

Raymond, P.E. 1925. Bull. Mus. Comp. Zool. (Harvard Univ.) v.67, n.1, pl.1, f.14.

Middle Ordovician, Table Head Grp. Division 13 of Logan's section or Division N, Zone 1, upper Table Head, Normanskill, from fault blocks near the fault striking N of Bell Burns, S of Table Head, west, Newfoundland, Newfoundland, Canada. Collector: Schuchert, C., 8/7/1910.

***Rasettia laevis* Raymond**

See *Iliaenurus laevis* Raymond.

***Reedops deckeri* Delo**

HYPOTYPE YPM 15349

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.25, pl.1, f.27,28.

Early Devonian, Helderbergian, Linden Grp, Birdsong Shale. Swaynes Mill, Henry Co., Tennessee, USA. Collector: Pate, F.W.

***Remopleurides canadensis* Billings**

HYPOTYPE YPM 25655

Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.32, pl.3, f.1.

Middle Ordovician. Basal part of formation, center ledges of W side of Smuggler's Harbor, Shaw (1968) loc. V109, Valcour Island, Lake Champlain, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

***Remopleuridiella caudalimbata* Ross**

HOLOTYPE YPM 18108

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.86, pl.20, f.1-3.

PARATYPE YPM 18107

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.86, pl.20, f.10.

PARATYPE YPM 18109

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.86, pl.20, f.4,5,9.

PARATYPE YPM 18110

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.86, pl.20, f.6.

PARATYPE YPM 18111

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.86, pl.20, f.8.

PARATYPE YPM 18112

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.86, pl.20, f.7.

PARATYPE YPM 18113 18114

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.86.

PARATYPE YPM 18115

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, p.86, pl.20, f.11,12.

Early Ordovician, Garden City Fm, Zone B. Float,  
98-118 ft above base of Garden City, measured  
section up from base of Garden City southward  
along ridge top on W side of Hillyard's Canyon,  
Bear River Range, and about 11 mi E of Preston,  
Preston Quad., W sec23T15SR41E, Franklin Co.,  
Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Richardsonella arctostriata* Raymond**  
See *Protapatokephalus arctostriatus*  
Raymond.

***Richardsonella germana* Raymond**

HOLOTYPE YPM 4745

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.440, pl.14, f.3.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.180, pl.14, f.3.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

***Richardsonella iole* (Walcott)**

HYPOTYPE YPM 4716

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.441.

=*Richardsonella laeviuscula* Raymond.  
Holotype. Raymond, P.E. 1924b. Rpt. Vt.  
St. Geol. p.181.

Late Cambrian, Gorge Fm. Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

***Richardsonella laeviuscula* Raymond**  
See *Richardsonella iole* (Walcott).

***Rollia goodwini* Cullison**

PARATYPE YPM 17175

Cullison, J.S. 1944. Bull. Tech. Ser.  
Missouri Univ. Sch. Mines Met. v.15, n.2,  
p.81, pl.34, f.33.

Early Ordovician, Jefferson City Grp, Rich  
Fountain Fm. Residual chert nodules, elevation  
1020 ft, Rolla quadrangle, E1/2E1/2SW1/  
4sec03,T37N,R08W, Phelps Co., Missouri, USA.  
Collector: Polhemus, J.

***Rossaspis superciliosa* (Ross)**  
See *Protopliomerops superciliosa* Ross.

***Saukia dunbari* Raymond**

HOLOTYPE YPM 4723

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.437, pl.14, f.7.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol.  
p.178, pl.14, f.7.

=*Saukiella dunbari*. Raymond, P.E. 1937.  
Bull. Geol. Soc. Am. v.48, p.1089.

Late Cambrian, Gorge Fm. Near Highgate Falls,  
Franklin Co., Vermont, USA. Collector:  
Schuchert, C., 7/1922.

***Saukia lodensis* (Whitfield)**

HYPOTYPE YPM 4746

Raymond, P.E. 1924a. Proc. Boston Soc.  
Nat. Hist. v.37, n.4, p.435.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.177.

=*Saukia* sp. ind. Raymond, P.E. 1937. Bull.  
Geol. Soc. Am. v.48, p.1089, pl.1, f.15.

Late Cambrian. Zone 2, Highgate Falls, Franklin  
Co., Vermont, USA. Collector: Schuchert, C. and  
Dunbar, C.O., 1923.



***Saukia* sp. ind. Raymond**

See *Saukia lodensis* (Whitfield).

***Saukia stosei* Walcott**

HYPOTYPE YPM 4729

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.436.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.178.

=*Saukiella inops* Raymond. Holotype.

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1090, pl.1, f.16.

HYPOTYPE YPM 4736

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.436.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.178.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Saukia wardi* Walcott**

SYNTYPE YPM 24759

Walcott, C.D. 1914. Smith. Misc. Coll. v.57, n.13, p.384, pl.69, f.1.

=*Tellerina wardi*. Resser, C.E. 1938. Spec. Pap. Geol. Soc. Am. n.15, p.101.

Cambrian, Shenandoah Limestone. Natural Bridge limestone, 1.5 mi NNE of Natural Bridge, Rockbridge Co., Virginia, USA. Collector: Ward, F. and class, 1912.

SYNTYPE YPM 27987

Walcott, C.D. 1914. Smith. Misc. Coll. v.57, n.13, p.384, pl.69, f.2.

=*Tellerina wardi*. Resser, C.E. 1938. Spec. Pap. Geol. Soc. Am. n.15, p.101, pl.16, f.2.

Cambrian, Shenandoah Limestone. Natural Bridge limestone, 1.5 mi NNE of Natural Bridge, Rockbridge Co., Virginia, USA. Collector: Ward, F. and class, 1912.

***Saukiella dunbari* Raymond**

See *Saukia dunbari* Raymond.

***Saukiella inops* Raymond**

See *Saukia stosei* Walcott.

***Scinocephalus? quadrihastatus* Ross**

HOLOTYPE YPM 18768

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.637, pl.62, f.21,25.

Early Ordovician, Garden City Fm, Zone G(2). 521 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

***Scinocephalus solitecti* Ross**

HOLOTYPE YPM 18125

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.90, pl.20, f.31,32,37.

PARATYPE YPM 18121

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.90, pl.20, f.25,36.

PARATYPE YPM 18126

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.90, pl.20, f.27,33,38.

PARATYPE YPM 18127

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.90.

PARATYPE YPM 18128

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.90, pl.20, f.30.

PARATYPE YPM 18129

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.90.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18130

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.90, pl.20, f.26.

Early Ordovician, Garden City Fm, Zone G(2)a. 518 ft above base of Garden City, northeast (N45E) along

0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18391

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.579, pl.81, f.17.

HYPOTYPE YPM 18392

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.579, pl.81, f.16.

HYPOTYPE YPM 18393

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.579, pl.81, f.15.

HYPOTYPE YPM 18394

Ross, R.J., Jr. 1951b. J. Paleont. v.25, n.5, p.581-582, pl.83, f.22.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

### ***Scotiella conservatrix* (McLearn)**

HYPOTYPE YPM 25111

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.1, f.3,4.

HYPOTYPE YPM 25112

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.4, pl.1, f.6,7.

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, between Stonehouse Brook and McPherson's Brook, SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

HYPOTYPE YPM 25113

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.4, pl.1, f.5

Early Devonian, Stonehouse Fm. Trilobite bed at top of section, Zone C of McLearn, along shore,

just NE of Stonehouse Brook, 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

See also *Dalmanitina logani conservatrix* McLearn.

### ***Scotiella logani* (Hall)**

HYPOTYPE YPM 25101

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.3, f.8.

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, just NE of Stonehouse Brook, 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

HYPOTYPE YPM 25102

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.33, pl.2, f.17.

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.3, f.7.

HYPOTYPE YPM 25103

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.3, f.3.

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, between Stonehouse Brook, and McPherson's Brook, SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

HYPOTYPE YPM 25104

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.2, f.4(lower right).

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, just NE of Stonehouse Brook, 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

HYPOTYPE YPM 25105

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.3, f.4.

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, SW of Stonehouse Brook, between 2.6 and 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

HYPOTYPE YPM 25106

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.2, f.3.

HYPOTYPE YPM 25107

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.3, f.6.

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, just SW of Stonehouse Brook, 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

HYPOTYPE YPM 25108

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.3, f.1.

HYPOTYPE YPM 25109

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.2, f.7.

HYPOTYPE YPM 25110

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.2, f.4(upper left), pl.3, f.5

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, just NE of Stonehouse Brook, 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

HYPOTYPE YPM 25114

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.4, pl.2, f.6.

HYPOTYPE YPM 25239

Shergold, J.H. 1967. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.112, p.8, pl.3, f.2.

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, just NE of Stonehouse Brook, 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

See also *Dalmantina logani* (Hall).

***Scotiella logani conservatrix* (McLearn)**

HYPOTYPE YPM 25656

Delo, D.M. 1940. Spec. Pap. Geol. Soc. Am. n.29, p.34, pl.2, f.20.

Early Devonian, Stonehouse Fm. Zone C of McLearn, along shore, just NE of Stonehouse Brook, 2.4 mi SW of Arisaig Point, Arisaig, Antigonish Co., Nova Scotia, Canada. Collector: Twenhofel, W.H., 1908.

See also *Dalmanitina logani conservatrix* McLearn.

***Scotoharpes fragilis* (Raymond)**

See *Eoharpes fragilis* Raymond.

***Scutellum pompilius* (Billings)**

See *Goldius pompilius* (Billings).

***Selenoharpes fragilis* (Raymond)**

See *Eoharpes fragilis* Raymond.

***Solenopleura franklinensis* Howell**

PARATYPE YPM 13404B

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1174.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13421A, 13423B†

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1174.

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13425

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1174.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13437E 13437F

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1174.††

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

†This is a chip with three individuals.

††The presence of this species on this slab is doubtful.



***Solenopleurella gaspensis* Kindle**

SYNTYPE YPM 17078

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.640, pl.2, f.17.<sup>†</sup>

SYNTYPE YPM 17079

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.640, pl.2, f.15.<sup>†</sup>

SYNTYPE YPM 17089

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, p.640, pl.2, f.16.<sup>†</sup>

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspé, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.

<sup>†</sup>The magnification for pl.2, f.15 is about 4x, not 6x as stated in the plate explanation.

***Sphaerexochus parvus* Billings**

SYNTYPE YPM 23305

Raymond, P.E. 1905a. Ann. Carnegie Mus. v.3, n.2, p.372, pl.14, f.22.

Raymond, P.E. 1910b. Rpt. Vt. St. Geol. p.246, pl.36, f.22.

Middle Ordovician, Chazy Grp. South end Valcour Island, Lake Champlain, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

***Spinagnotus franklinensis* Howell**

PARATYPE YPM 13402,13403

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.

Middle Cambrian, St. Albans Slate. 0.75 mi SW of Rockledge, N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13404A

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13405,13406

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.

Middle Cambrian, St. Albans Slate. 0.75 mi SW of Rockledge, N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13407<sup>†</sup>

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.

Middle Cambrian, St. Albans Shale. Shale that outcrops N and S of St. Albans, Franklin Co., Vermont, USA.

PARATYPE YPM 13408

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.

Middle Cambrian, St. Albans Slate. 0.125 mi SW of Rockledge, N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13432A

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

PARATYPE YPM 13437A

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.<sup>††</sup>

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.<sup>††</sup>

Middle Cambrian, St. Albans Slate. 1 mi SE of Swanton Junction, Franklin Co., Vermont, USA. Collector: Schuchert, C.

HYPOTYPE YPM 13424

Howell, B.F. 1935. J. Paleont. v.9, n.3, p.219.

Howell, B.F. 1937. Bull. Geol. Soc. Am. v.48, n.8, p.1161.<sup>†††</sup>

Middle Cambrian, St. Albans Slate. Conner Farm, 1 mi SW of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate these specimens. They are believed to be permanently lost.

††The presence of this species on this slab is doubtful.

†††Incorrectly cited as paratype on p.1162.

***Staurocephalus lagena* Holloway**

See *Staurocephalus murchisoni* Barrande.

***Staurocephalus murchisoni* Barrande**

HOLOTYPE YPM 26145

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.123, pl.10, f.1.

=*Staurocephalus lagena* Holloway.

Hypotype. Holloway, D.J. 1980.

Palaeontogr. Abt. A, bd.170, p.51.

HOLOTYPE YPM 26146

Thomas, N.L. 1929b. Bull. Denison Univ. Sci. Lab. v.24, p.123, pl.10, f.2.

=*Staurocephalus lagena* Holloway. Hypotype. Holloway, D.J. 1980. Palaeontogr. Abt. A, bd.170, p.51.

Early Silurian, Wenlock, St. Clair Fm. Hills between Penters Bluff [Izzard Co.] and St. Clair Spring [Independence Co.], N of Batesville, Independence Co., Arkansas, USA. Collector: Thomas, N.L.

***Stenelymus kobayashii* Raymond**

HOLOTYPE YPM 14717

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1100, pl.2, f.1.

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.480, pl.57, f.33,34.

Shaw, A.B. 1966. J. Paleont. v.40, n.2, p.290.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. In limestone pebble, 4.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Prindle, ?.

***Stenocombus princeps* Raymond**

HOLOTYPE YPM 14733

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1107, pl.2, f.17.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford

Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

***Stenopilus brevis* Raymond**

HOLOTYPE YPM 4756

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.420, pl.13, f.9.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.165, pl.13, f.9.

=*Leiocoryphe brevis*. Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1021.

=*Leiocoryphe brevis*. Stitt, J.H. 1971. Bull. Okla. Geol. Surv. n. 110, p.33.

=*Leiocoryphe brevis*. Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.60, pl.49, f.13.

HOLOTYPE YPM 26988

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.420.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.165.

Late Cambrian, Gorge Fm. Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

***Stenopilus convergens* Raymond**

See *Plethopeltis convergens* Raymond.

***Stenopilus elongatus* Raymond**

See *Plethopeltis lata* Raymond.

***Stenopilus pronus* Raymond**

HOLOTYPE YPM 4762

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.420, pl.13, f.6,7.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.164, pl.13, f.6,7.

Rasetti, Franco. 1945. Naturaliste Canadien v.72, n.5-6, p.123.

Clark, M.G. and A.B. Shaw. 1968. J. Paleont. v.42, n.4, p.1021.

Stitt, J.H. 1971. Bull. Okla. Geol. Surv. n.110, p.36.

Late Cambrian, Gorge Fm. Near Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C., 7/1922.

***Stenosaukia irrasa* Raymond**

HOLOTYPE YPM 14707

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1090, pl.1, f.17.

=*Prosaukia irrasa*. Rasetti, Franco. 1946b. Am. J. Sci. v.244, n.8, p.543.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.28, pl.15, f.21.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Stigmacephalus? distorta* Wilson**

HOLOTYPE YPM 18593

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.652, pl.92, f.16,17.

Late Cambrian, Conococheague Limestone. Edge of turn of road N from General Mansfield monument, 518 ft above basal sandy member, Antietam Battlefield, W axis of Syncline between Smoketown road and East Woods, crosses Mansfield Avenue 250 yd E of Hagerstown Pike, N of Sharpsburg, Washington Co., Maryland, USA. Collector: Wilson, J.L.

***Strigigenalis abdita* Ross**

PARATYPE YPM 18735

Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671, pl.67, f.11,12,17.

PARATYPE YPM 18736

Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671, pl.67, f.16.

PARATYPE YPM 18737

Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671, pl.67, f.21-23.

PARATYPE YPM 18738

Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671, pl.67, f.26.

PARATYPE YPM 18739

Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671, pl.67, f.27.

PARATYPE YPM 18740

Ross, R.J., Jr. 1953 J. Paleont. v.27, n.5, p.671, pl.67, f.18.

Early Ordovician, Garden City Fm, Zone G(2). 521 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

See also *Platycolpus* sp.***Strotocephala howelli* Raymond**

HOLOTYPE YPM 14716

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1098, pl.1, f.26.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Sulcocephalus benesulcatus* Wilson**

HOLOTYPE USNM 222667†

Wilson, J.L. 1948. J. Paleont. v.22, n.1, p.31, pl.8, f.3-5.

HYPOTYPE USNM 222666†

Wilson, J.L. 1948. J. Paleont. v.22, n.1, p.31, pl.8, f.2.

†These specimens are not in the Invertebrate Paleontology Collections at Yale University's Peabody Museum as reported by Wilson (1948). They are at the National Museum of Natural History, Smithsonian Institution.

***Sulcocephalus candidus* (Resser)**

HYPOTYPE USNM 222665†

Wilson, J.L. 1948. J. Paleont. v.22, n.1, p.31, pl.8, f.1.

†This specimen is not in the Invertebrate Paleontology Collections at Yale University's Peabody Museum as reported by Wilson (1948). It is at the National Museum of Natural History, Smithsonian Institution.

***Symphysurina* sp. A**

HYPOTYPE YPM 18190

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.115, pl.26, f.17.



Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

HYPOTYPE YPM 18315

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.115, pl.28, f.34-36.

HYPOTYPE YPM 18316

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.115, pl.28, f.31-33.

HYPOTYPE YPM 18318

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.115, pl.28, f.29.

Early Ordovician, Garden City Fm, Zone A. 32-35 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Symphysurina* sp. B**

HYPOTYPE YPM 18188

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.116, pl.28, f.19,24.

HYPOTYPE YPM 18313

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.116, pl.28, f.30.

HYPOTYPE YPM 18314

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.116, pl.28, f.23.

Early Ordovician, Garden City Fm, Zone C. 236 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E

of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Symphysurina* cf. *S. woosteri* Walcott**

HYPOTYPE YPM 18375

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.114, pl.23, f.11.

HYPOTYPE YPM 18376

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.114,115, pl.23, f.12.

HYPOTYPE YPM 18377

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.114, pl.23, f.10.

HYPOTYPE YPM 18378

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.114, pl.23, f.8.

HYPOTYPE YPM 18379

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.114, pl.23, f.9.

HYPOTYPE YPM 18380

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.114, pl.23, f.7.

Early Ordovician, Garden City Fm, Zone A. 50 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

### ***"Symphysurus? goldfussi" Walcott***

HYPOTYPE YPM 18354

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.64, pl.15, f.18.

Middle Ordovician, Swan Peak Fm, Zone M. Basal 189 ft of Swan Peak, measured section down from near base of Swan Peak into Garden City, small knoll on NE side of Round Hill, 1 mi E of US Rt. 91, and 2 mi N of Mantua, Logan Quad., SE sec10T9NR1W, Box Elder Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18355

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.64, pl.15, f.16.

HYPOTYPE YPM 18357

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.64, pl.15, f.17.

Middle Ordovician, Swan Peak Fm, Zone M. Near base of Swan Peak, along measured section, SW side of Fish Haven Creek, 4.35 mi (by lumber road) W of Fish Haven, Montpelier Quad., NW SW sec34T13NR3E, Bear Lake Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

***Taenicephalus shumardi* (Hall)**

HYPOTYPE YPM 18577

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.652, pl.95, f.25.

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.652, pl.95, f.21,22.

Late Cambrian, Gatesburg Fm. Dark platy limestone, Imler Quarry, 148 ft above lowest exposed beds of Ore Hill Mbr, just E of township road to E of Evitt's Mountain, 2.5 mi S of junction of this road with Bedford-Rainsburg road at Egoff, Colerain Township, Colerain Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HYPOTYPE YPM 18579

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.652, pl.95, f.23.

Late Cambrian, Gatesburg Fm. Dark platy limestone, Imler Quarry, 150 ft above lowest exposed beds of Ore Hill Mbr, just E of township road to E of Evitt's Mountain, 2.5 mi S of junction of this road with Bedford-Rainsburg road at Egoff, Colerain Township, Colerain Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Taenicephalus* sp.**

HYPOTYPE YPM 18573

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.653, pl.95, f.26.

HYPOTYPE YPM 18576

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.653, pl.95, f.18.

HYPOTYPE YPM 18580

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.653, pl.95, f.24.

Late Cambrian, Gatesburg Fm. Near top of member, on hill top 0.25 mi E of gravel road, 0.5 mi SW of crossing of country road and PA Hwy 868, in small ledges in field near ruined farmhouse, 2.5 mi E of Lafayetteville, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Talbotina degreasensis* Lochman**

HOLOTYPE YPM 15829

Lochman, C. 1938. J. Paleont. v.12, n.5, p.467, pl.56, f.12,13.

PARATYPE YPM 15827

Lochman, C. 1938. J. Paleont. v.12, n.5, p.467.

PARATYPE YPM 15828

Lochman, C. 1938. J. Paleont. v.12, n.5, p.467, pl.56, f.14,15.

PARATYPE YPM 15830, 31334, 31335

Lochman, C. 1938. J. Paleont. v.12, n.5, p.467.

Middle Cambrian, March Point Fm. Zone 24, March Point section, to the E along shore, St. George Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O. and Leith, E.I., 1933.

See also *Talbotina solitaris* Lochman.

***Talbotina solitaris* Lochman**

HOLOTYPE YPM 15826

Lochman, C. 1938. J. Paleont. v.12, n.5, p.468, pl.56, f.16-18.

= *Talbotina degreasensis* Lochman.

Hypotype. Westrop, S.R. 1992 J. Paleont. v.66, n.2 p.250.

Middle Cambrian, March Point Fm. Zone 24, March Point section, to the E along shore, St. George Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O. and Leith, E.I., 1933.

***Tatonaspis breviceps* (Raymond)**

See *Iliaenurus breviceps* Raymond.

***Tellerina wardi* (Walcott)**

See *Saukia wardi* Walcott.

***Terranovella obscura* Lochman**

HOLOTYPE YPM 15843

Lochman, C. 1938. J. Paleont. v.12, n.5, p.473, pl.56, f.29,30.

PARATYPE YPM 15844

Lochman, C. 1938. J. Paleont. v.12, n.5, p.473.

Late Cambrian, Shallow Bay Fm. Loc. 2 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

***Tesselacauda depressa* Ross**

HOLOTYPE YPM 18278

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.130, pl.31, f.28.

PARATYPE YPM 18276

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.130, pl.31, f.31.

PARATYPE YPM 18277

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.130, pl.31, f.27.

PARATYPE YPM 18279

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.130, pl.31, f.29.

PARATYPE YPM 18280

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.130, pl.31, f.30.

PARATYPE YPM 18281

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.130, pl.34, f.1-3,18.

PARATYPE YPM 18282

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.130, pl.34, f.4.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW

sec24T15SR41E, Franklin Co., Idaho, USA.  
Collector: Ross, R.J., Jr., 1947.

***Theodenisia macrops* (Raymond)**

See *Acheilus macrops* Raymond.

***Theodenisia spicatus* (Raymond)**

See *Acheilus spicatus* Raymond.

***Tonkinella breviceps* Kobayashi**

SYNTYPE YPM 14327

Kobayashi, T. 1934. Am. J. Sci. v.27, n.160, p.300, pl.1, f.2.

Lectotype. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.59, pl.16, f.8.

SYNTYPE YPM 14330

Kobayashi, T. 1934. Am. J. Sci. v.27, n.160, p.300, pl.1, f.4.

Paralectotype. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.59.

SYNTYPE YPM 14335

Kobayashi, T. 1934. Am. J. Sci. v.27, n.160, p.300, pl.1, f.6(left).

Paralectotype. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.59, pl.17, f.2.

SYNTYPE YPM 32862

Kobayashi, T. 1934. Am. J. Sci. v.27, n.160, p.300, pl.1, f.3.

Paralectotype. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.59, pl.16, f.11.

SYNTYPE YPM 32863

Kobayashi, T. 1934. Am. J. Sci. v.27, n.160, p.300, pl.1, f.6(right).

Paralectotype. Jell, P.A. and N.C. Hughes. 1997. v.58, n.1, p.59.

SYNTYPE YPM 32864

Kobayashi, T. 1934. Am. J. Sci. v.27, n.160, p.300, pl.1, f.5.

Paralectotype. Jell, P.A. and N.C. Hughes. 1997. Spec. Pap. Palaeont. v.58, n.1, p.59, pl.16, f.3.



Middle Cambrian. Green phyllitic shale with ferruginous patches, along road between Turkapur and bend of the Talar River, Talar Valley, 5 mi from Handawara (Handawor) on road to Zachaldor, NW part of Vale of Kashmir, Kashmir, India. Collector: de Terra, H., 1932.

***Tostonia duplicata* Raymond**

HOLOTYPE YPM 14753

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1121, pl.3, f.17.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Tostonia duplicata?* Raymond**

HYPOTYPE YPM 14754

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1120.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Tostonia unisulcata* Raymond**

HOLOTYPE YPM 14755

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1121, pl.3, f.18.

Late Cambrian, Gorge Fm. Lowest zone in formation, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C.

***Tretaspis cerioides* (Angelin)**

HYPOTYPE YPM 26202

Whittington, H.B. 1941. J. Paleont. v.15, n.1, p.29, pl.6, f.36.

Late Ordovician, Grande Coupe Beds. Sea cliffs on S flank of Mount Joli, 75 ft. S of fault contact, Perce Village, Gaspé Peninsula, Quebec, Canada. Collector: Whittington, H.B., 1940.

***Tretaspis clarkei* Cooper**

HOLOTYPE YPM 12927

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.1,4.

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

PARATYPE YPM 12911<sup>†</sup>

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365.

Late Ordovician, Grande Coupe Beds. About 100 ft below fault, South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

<sup>†</sup>This is a specimen lot with five individuals.

PARATYPE YPM 12913<sup>†</sup>

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365.

Late Ordovician, Grande Coupe Beds. South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Schuchert, C. and Cooper, G.A., 8/1929.

<sup>†</sup>This is a specimen lot of 18 individuals.

PARATYPE YPM 30454

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.2.<sup>†</sup>

PARATYPE YPM 30455

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.3.<sup>†</sup>

PARATYPE YPM 30456

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.6.<sup>†</sup>

PARATYPE YPM 30457

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.7,8.<sup>†</sup>

PARATYPE YPM 30458

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.5.<sup>†</sup>

PARATYPE YPM 30459

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.9.<sup>†</sup>

PARATYPE YPM 30460

Cooper, G.A. 1930. Am. J. Sci. ser.5, v.20, n.119, p.365, pl.4, f.10.<sup>†</sup>

Late Ordovician, Grande Coupe Beds. About 100 ft below fault, South Cove, S of Perce, Gaspé Peninsula, Quebec, Canada. Collector: Cooper, G.A., 8/1929.

†Cited as YPM 12911.

***Triarthrus becki* Green†**

HYPOTYPE YPM 201

Beecher, C.E. 1893c. Am. J. Sci. ser.3, v.46, p.468, tf.2,3.

Walcott, C.D. 1894. Proc. Biological Society of Washington v.9, p.89, pl.1, f.6

Beecher, C.E. 1894a. Am. J. Sci. ser.3,v.47, p.299, tf.1.

Beecher, C.E. 1894b. Am. Geol. v.13, p.40, tf.2,3.

Walcott, C.D. 1918. Smith. Misc. Coll. v.67, n.4, p.140, pl.29, f.1.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.44, pl.2, f.1, pl.3, f.4, pl.4, f.1,2.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, pl.22, f.4.

HYPOTYPE YPM 202

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.44, pl.5, f.6.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 203

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.6, f.1.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 204

Beecher, C.E. 1902. Am. J. Sci. ser.4,v.13, pl.2, f.4,5.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.154, tf.42, pl.3, f.1, pl.4, f.6.

Walcott, C.D. 1921. Smith. Misc. Coll. v.67, n.7, p.423, tf.23.

=*Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.207.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1975. Fossils and Strata n.4, p.51, tf.2,12, pl.1, f.2.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, pl.21, f.4.

HYPOTYPE YPM 205

Beecher, C.E. 1902. Am. J. Sci. ser.4,v.13, pl.5, f.2,3.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.155, pl.2, f.4.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 206

Beecher, C.E. 1893c. Am. J. Sci. ser.3, v.46, p.469, tf.1(left).

Beecher, C.E. 1894b. Am. Geol. v.13, p.42, pl.3, f.7(left).

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.153, pl.2, f.3.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 207

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.3, f.5.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, pl.23, f.3.

HYPOTYPE YPM 209

Beecher, C.E. 1894a. Am. J. Sci. ser.3, v.47, p.300, pl.7, f.1.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.5, f.1, pl.6, f.2.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 210

Beecher, C.E. 1893c. Am. J. Sci. ser.3, v.46, p.469, tf.1(right).

Beecher, C.E. 1894b. Am. Geol. v.13, p.42, pl.3, f.7(right).

Beecher, C.E. 1902. Am. J. Sci. ser.4, v.13, pl.2, f.1.

Walcott, C.D. 1918. Smith. Misc. Coll. v.67, n.4, p.138, pl.29, f.9.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.2, f.3.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.  
Collector: Beecher, C.E. and Nason, F.L., 7/1893.

HYPOTYPE YPM 211

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.2, f.5.

Walcott, C.D. 1921. Smith. Misc. Coll. v.67, n.7, p.416, pl.104, f.15.

= *Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.205.

Stormer, Leif. 1951. Norsk Geol. Tidsskr. n.29, p.130.

= *Triarthrus eatoni* (Hall). Hypotype. Raw, Frank. 1953. J. Paleont. v.27, n.1, p.105.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 213

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.1, f.1.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 214

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.1, f.2, pl.3, f.6.

= *Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.205.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 215

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.1, f.4.

= *Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.205.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 216

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.3, f.3.

= *Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.205.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.22.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 217

Beecher, C.E. 1895a. Am. Geol. v.15, p.94, pl.5, f.10.

Walcott, C.D. 1918. Smith. Misc. Coll. v.67, n.4, pl.30, f.17.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.1, f.3.

= *Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.205.

= *Triarthrus eatoni* (Hall). Hypotype. Raw, Frank. 1953. J. Paleont. v.27, n.1, p.105.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 218

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.157, tf.43, pl.6, f.3.

Walcott, C.D. 1921. Smith. Misc. Coll. v.67, n.7, p.416, pl.104, f.13.

= *Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 219

Beecher, C.E. 1896. Am. J. Sci. ser.4, v.1, pl.8, f.2.

Beecher, C.E. 1902. Am. J. Sci. ser.4, v.13, p.168, pl.4, f.1, pl.5, f.4.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.2, f.6, pl.4, f.4.

Walcott, C.D. 1921. Smith. Misc. Coll. v.67, n.7, p.417, pl.104, f.14.



=*Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.203, tf.22d.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.22.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 220

Beecher, C.E. 1895a. Am. Geol. v.15, pl.4, f.1.

Beecher, C.E. 1896. Am. J. Sci. ser.4, v.1, p.252, pl.8, f.2.

Beecher, C.E. 1902. Am. J. Sci. ser.4, v.13, pl.3, f.1.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.3, f.2.

=*Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.203, tf.22a,22b.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.22.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1975. Fossils and Strata n.4, p.48.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, pl.23, f.2.

HYPOTYPE YPM 221

Beecher, C.E. 1902. Am. J. Sci. ser.4, v.13, pl.2, f.3.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.5, f.5.

Walcott, C.D. 1921. Smith. Misc. Coll. v.67, n.7, p.414.

=*Triarthrus eatoni* (Hall). Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.203, tf.22c.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 222

Beecher, C.E. 1894a. Am. J. Sci. ser.3, v.47, pl.7, f.3.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.42, pl.4, f.5.

Walcott, C.D. 1921. Smith. Misc. Coll. v.67, n.7, p.415, pl.104, f.12,12a.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 223

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.4, f.3.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 226

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.1, f.5.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 227

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, pl.5, f.4.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 228

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1975. Fossils and Strata n.4, p.51, tf.11, pl.1, f.1.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, tf.21,23, pl.17,21.

HYPOTYPE YPM 229

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, pl.5, f.2.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 230

Beecher, C.E. 1894a. Am. J. Sci. ser.3, v.47, p.300, pl.7, f.2.

Beecher, C.E. 1902. Am. J. Sci. ser.4, v.13, pl.2, f.2.

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.158, tf.44, pl.5, f.3.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 246

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.43, 153.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 247

Beecher, C.E. 1895a. Am. Geol. v.15, p.94, pl.5, f.8.

HYPOTYPE YPM 6597

Beecher, C.E. 1895c. Am. Geol. v.16, p.172, pl.8, f.13.<sup>††</sup>

=undet. Trilobita. Whittington, H.B. 1957. J. Paleont. v.31, p.943.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.20.

HYPOTYPE YPM 6664

Beecher, C.E. 1895c. Am. Geol. v.16, p.172, pl.8, f.12.

=undet. Trilobita. Whittington, H.B. 1957. J. Paleont. v.31, p.943.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.20.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

HYPOTYPE YPM 26257-26267

Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.153.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.

HYPOTYPE YPM 30547<sup>†††</sup>

Beecher, C.E. 1893b. Am. J. Sci. ser.3, v.52, p.362, tf.1.

Beecher, C.E. 1894b. Am. Geol. v.13, p.42, pl.3, f.1.

HYPOTYPE YPM 30548<sup>†††</sup>

Beecher, C.E. 1895a. Am. Geol. v.15, p.94, pl.5, f.9.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.

HYPOTYPE YPM 30549

Beecher, C.E. 1895c. Am. Geol. v.16, p.172, pl.8, f.1, 13.<sup>††</sup>

=undet. Trilobita. Whittington, H.B. 1957. J. Paleont. v.31, p.943, pl.115, f.17.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.20.

HYPOTYPE YPM 30551

Beecher, C.E. 1895c. Am. Geol. v.16, p.172, pl.8, f.12.

=undet. Trilobita. Whittington, H.B. 1957. J. Paleont. v.31, p.943, pl.115, f.19.

=*Triarthrus eatoni* (Hall). Hypotype. Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.20.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

<sup>†</sup>The trivial name of this taxon is misspelled by Beecher (1893a, 1893b, 1893c, 1894a, 1894b, 1895a, 1895c, 1896, 1902), Raymond (1920) and Walcott (1916, 1921). The correct spelling is *beckii*.

<sup>††</sup>Collection data implies YPM 6597 and 30549 served as the basis for pl.8, f.1.

<sup>†††</sup>A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Triarthrus becki macastyensis* Twenhofel**

HOLOTYPE YPM 26270

Twenhofel, W.H. 1914. Bull. Geol. Surv. Can. v.3, n.19, p.35.

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.324, pl.55, f.7.

= *Triarthrus eatoni* (Hall). Hypotype.

Ludvigsen, Rolf and P.A. Tuffnell. 1983. Geol. Mag. v.120, n.6, p.571, pl.3, f.1.

PARATYPE YPM 26271

Twenhofel, W.H. 1914. Bull. Geol. Surv. Can. v.3, n.19, p.35.

Twenhofel, W.H. 1928. Mem. Can. Geol. Surv. n.154, p.324, pl.55, f.6.

= *Triarthrus eatoni* (Hall). Hypotype.

Ludvigsen, Rolf and P.A. Tuffnell. 1983. Geol. Mag. v.120, n.6, p.571, pl.3, f.2.

Late Ordovician, Macasty Shale. Macasty Bay, Anticosti Island, Quebec, Canada. Collector: Twenhofel, W.H., 1909.

***Triarthrus beckii* Green**

HYPOTYPE YPM 26755†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.87, pl.f.6.

Middle-Late Ordovician, Utica Shale. Cohoe's Falls, Albany Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

See also *Triarthrus becki* Green.***Triarthrus eatoni* (Hall)**

HYPOTYPE YPM 6695

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 27801

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.7, tf.4.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

HYPOTYPE YPM 27802

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.14.

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, pl.21, f.1.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.

HYPOTYPE YPM 27803

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.14.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

HYPOTYPE YPM 27813

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, tf.15, pl.18, f.4.

HYPOTYPE YPM 28131

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.109, pl.23, f.1.

HYPOTYPE YPM 28201-28204

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 28205

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.101.

HYPOTYPE YPM 28206

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, pl.18, f.1,2.

HYPOTYPE YPM 28207-28221

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 28222

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100, pl.21, f.2.

HYPOTYPE YPM 28223

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.†

HYPOTYPE YPM 28224-28249

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.



**HYPOTYPE YPM 28250**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, pl.18, f.1,2.

**HYPOTYPE YPM 28251, 28252**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

**HYPOTYPE YPM 28253, 28254**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.101.

**HYPOTYPE YPM 28255, 28256**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

**HYPOTYPE YPM 28257**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, ff.26, pl.22, f.2.

**HYPOTYPE YPM 28258**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.

**HYPOTYPE YPM 28259**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100, ff.17, pl.19, f.4.

Late Ordovician, Frankfort Shale. Rome, Oneida Co., New York, USA. Collector: Braun, F.

**HYPOTYPE YPM 28260-28263**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

**HYPOTYPE YPM 28264**

Cisne, J.L. 1975. *Fossils and Strata* n.4, p.51, ff.13, pl.2, f.1.

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.109, ff.19,20, pl.20, f.3,4.

**HYPOTYPE YPM 28265**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.122, pl.23, f.4.

**HYPOTYPE YPM 28266**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.

**HYPOTYPE YPM 28267**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

**HYPOTYPE YPM 28268**

Cisne, J.L. 1975. *Fossils and Strata* n.4, pl.2, f.1.

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, pl.20, f.3.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.

**HYPOTYPE YPM 28269**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.101.

**HYPOTYPE YPM 28270, 29274**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

**HYPOTYPE YPM 29275**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

**HYPOTYPE YPM 29276-29279**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

**HYPOTYPE YPM 29280**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.101.

**HYPOTYPE YPM 29281, 29282**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

**HYPOTYPE YPM 29283-29286**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.101.

**HYPOTYPE YPM 29287-29289**

Cisne, J.L. 1981. *Paleont. Am.* v.9, n.53, p.100.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

**HYPOTYPE YPM 29290-29292**

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.14.

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 29293

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.14.

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 29294, 29295

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.14.

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 29296

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.14.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA.

HYPOTYPE YPM 29320-29322

Cisne, J.L. 1981. Paleont. Am. v.9, n.53, p.100.

HYPOTYPE YPM 30574-30586

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.14.

HYPOTYPE YPM 30600-30644

Cisne, J.L. 1973. Postilla (Peabody Mus. Nat. Hist., Yale Univ.) n.160, p.7, ff.4.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

See also *Triarthrus becki* Green and *Triarthrus becki macastyensis* Twenhofel.

†Housed with types of Cisne, J.L., 1981.

***Tricrepicephalus johnsoni* Kindle**

See *Crepicephalus* sp.

***Tricrepicephalus murphyi* Kindle**

PARATYPE YPM 16058

Kindle, C.H. 1948. Am. J. Sci. v.246, p.448, pl.1, f.1.

Cambrian, Murphy Creek Fm. S bank of Murphy Creek, 1.7 mi W of Corner-of-the-Beach, Gaspe Peninsula, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E., 8/1938.

***Tricrepicephalus rusticus* Kindle**

PARATYPE YPM 16002

Kindle, C.H. 1948. Am. J. Sci. v.246, p.447, pl.1, f.7.

PARATYPE YPM 16057

Kindle, C.H. 1948. Am. J. Sci. v.246, p.447, pl.1, f.5.

Cambrian, Murphy Creek Fm. S bank of Murphy Creek, 1.7 mi W of Corner-of-the-Beach, Gaspe Peninsula, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E., 8/1938.

***Tricrepicephalus tripunctatus* (Whitfield)**

See *Arionellus tripunctatus* Whitfield.

***Trigonocerca typica* Ross**

HOLOTYPE YPM 18147

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.104, pl.26, f.11-13.

PARATYPE YPM 18148

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.104, pl.26, f.10.

Early Ordovician, Garden City Fm, Zone H. 1135-1343 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18149

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.104, pl.26, f.6.

PARATYPE YPM 18150

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.104, pl.26, f.5.

Early Ordovician, Garden City Fm, Zone H. 1135-1343 ft above base of Garden City, measured section up from base of Garden City from a point

about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18227

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.104, pl.26, f.8.

PARATYPE YPM 18228

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.104, pl.26, f.9.

Early Ordovician, Garden City Fm, Zone G(2)d. 655 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18333

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.104, pl.26, f.7.

Early Ordovician, Garden City Fm, Zone H. 286-372 ft below top of Garden City, along measured section, SW side of Fish Haven Creek, 4.35 mi (by lumber road) W of Fish Haven, Montpelier Quad., NW SW sec34T13NR3E, Bear Lake Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

### ***Trimerus delphinocephalus* Green**

HYPOTYPE YPM 26753†

Green, Jacob. 1832. A monograph of the trilobites of North America—with coloured models of the species, p.82, pl.f.1.

Early Silurian, Wenlock, Clinton Grp. Williamsville, Niagara Co., New York, USA.

†This is a replica. The location of the actual specimen has not been determined.

### ***Trinucleus concentricus* Eaton**

HYPOTYPE YPM 235

Beecher, C.E. 1895b. Am. J. Sci. ser.3, v.49, p.309, pl.3, f.5,6.

=*Cryptolithus tessellatus* Green. Hypotype. Raymond, P.E. 1920a. Mem. Conn. Acad. Arts Sci. v.7, p.160, tf.45, pl.7, f.2-5, pl.8, f.3, pl.9,f1,2.

=*Cryptolithus tessellatus* Green. Hypotype. Stormer, Leif. 1939. Norsk Geol. Tidsskr. n.19, p.210, tf.24.

HYPOTYPE YPM 243

Beecher, C.E. 1895b. Am. J. Sci. ser 3, v.49, pl.3, f.4.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Valiant, W.S., 1892.

HYPOTYPE YPM 6606†

Beecher, C.E. 1895b. Am. J. Sci. ser.3, v.49, p.309, pl.3, f.3.

Middle Ordovician. Sloop Bay, Valcour Island, Clinton Co., New York, USA. Collector: Raymond, P.E., 1903.

†A thorough search by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

### ***Tropidocoryphe richterorum* Cisne**

HOLOTYPE YPM 26099

Cisne, J.L. 1968. J. Paleont. v.42, n.1, p.232, f.1A-D.

Late Devonian, Ludlowville Fm. RR cut, East Bethany, Genesee Co., New York, USA.

### ***Tsinania scrinium* Raymond**

HOLOTYPE YPM 14744

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1113, pl.3, f.6.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.

### ***Ucebia lata* Raymond**

HOLOTYPE YPM 14721

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1103, pl.2, f.2.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Found near limestone lentils of Hungerford Shale, NW of Georgia Center, loose block, Franklin Co., Vermont, USA. Collector: McGerrigle, H.W.



PARATYPE YPM 14722

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1103, pl.2, f.4.

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Sandy limestone at base of conglomerate, 3.5 mi N of St. Albans, 1 mi S of Rockledge, Franklin Co., Vermont, USA. Collector: Schuchert, C., Keith, A. and Prindle, ?.

PARATYPE YPM 14723

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1103, pl.2, f.3.<sup>†</sup>

Late Cambrian, Sweetsburg Fm, Rockledge Cgl Mbr. Sandy limestone at base of Corless Cgl, 3.5 mi N of St. Albans, 1 mi S of Rockledge, Franklin Co., Vermont, USA. Collector: Schuchert, C.

<sup>†</sup>Not 14722 as stated on p.1103 and in the explanation for pl.2, f.3.

***Ucebia simplex* Raymond**

HOLOTYPE YPM 14724

Raymond, P.E. 1937. Bull. Geol. Soc. Am. v.48, p.1103, pl.2, f.5.

=*Cephalocoelia?* *simplex*. Rasetti, Franco. 1946b. Am. J. Sci. v.244, n.8, p.450.

=*Distazeris simplex*. Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.468.

HYPOTYPE YPM 18085

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.1.

HYPOTYPE YPM 18086

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.2.

HYPOTYPE YPM 18087

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.3.

HYPOTYPE YPM 18088

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.4.

Early Ordovician, Garden City Fm, Zone E. 413 ft (313 ft in Ross notebook) above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at

an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18094

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.21.

HYPOTYPE YPM 18095

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.22.

HYPOTYPE YPM 18096

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.23.

HYPOTYPE YPM 18097

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.24.

HYPOTYPE YPM 18098

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.25.

HYPOTYPE YPM 18099

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.26.

HYPOTYPE YPM 18100

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.27.

HYPOTYPE YPM 18101

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.28.

HYPOTYPE YPM 18102

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.29.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

**unassigned pygidium**

HYPOTYPE YPM 18061

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.17, f.23,28,29.

HYPOTYPE YPM 18062

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.17, f.32,33.

HYPOTYPE YPM 18078

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.8,9.

HYPOTYPE YPM 18079

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.5,7.

HYPOTYPE YPM 18090

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.6,11,15.

HYPOTYPE YPM 18091

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.12,16.

HYPOTYPE YPM 18092

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.13,14,17.

HYPOTYPE YPM 18093

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.18-20.

HYPOTYPE YPM 18103

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.30,31.

HYPOTYPE YPM 18104

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.32,35.

HYPOTYPE YPM 18105

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.33,36.

HYPOTYPE YPM 18106

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.19, f.34,38.

HYPOTYPE YPM 18207

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.30, f.9.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

HYPOTYPE YPM 18209

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.30, f.6-8.

HYPOTYPE YPM 18210

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.30, f.17-19.

Early Ordovician, Garden City Fm, Zone G(2)c. 558 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18211

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.30, f.12,13,16.

Early Ordovician, Garden City Fm, Zone G(2)a. Float, about 500 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

HYPOTYPE YPM 18212

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.30, f.11,15.

Early Ordovician, Garden City Fm, Zone G(2)a. 498 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18214

Ross, R.J., Jr. 1951a. Bull. Peabody Mus.  
Nat. Hist. n.6, pl.30, f.20,21,24.

Early Ordovician, Garden City Fm, Zone G(2)e. 704-786 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946.

HYPOTYPE YPM 18215

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.30, f.23,26.

HYPOTYPE YPM 18216

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.30, f.27.

Early Ordovician, Garden City Fm, Zone G(1). 428 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946.

HYPOTYPE YPM 18221

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.19, f.37.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

### unassigned pygidium B

HYPOTYPE YPM 18475

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.649, pl.95, f.13.

Late Cambrian, Gatesburg Fm. Dark crystalline limestone, 36 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

### unassigned pygidium L

HYPOTYPE YPM 18601

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.650, pl.95, f.14.

Late Cambrian, Gatesburg Fm. Crystalline limestone, 55 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

### unassigned pygidium P

HYPOTYPE YPM 18562

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.650, pl.93, f.20.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 68 ft above base of member, dolomite ledges in wheat field S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

### unassigned species no. 1

HYPOTYPE YPM 26192

Troelsen, J.C. 1947. Am. J. Sci. v.245, n.9, p.541, pl.1, f.7-9.

Late Cambrian, East Arm Fm. SW of entrance to SE arm of Bonne Bay, Newfoundland, Canada. Collector: Johnson, H., 1945.

### unassigned species no. 2

HYPOTYPE YPM 26193

Troelsen, J.C. 1947. Am. J. Sci. v.245, n.9, p.542, pl.1, f.10-12.

Late Cambrian, East Arm Fm. SW of entrance to SE arm of Bonne Bay, Newfoundland, Canada. Collector: Johnson, H., 1945.

### undet. Crepicephalidae

HYPOTYPE YPM 18641

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.476, pl.57, f.31,32.†

Middle Cambrian, Rockledge Cgl. Rockledge matrix, Rockledge Estate, 4.4 mi of N of St. Albans on W side of St. Albans-Highgate Falls road, St. Albans 7.5 Quad., Franklin Co., Vermont, USA. Collector: Shaw, A.B.



†Cited as "Pygidium No. 2."

**undet. Lichidae**

See *Phaethonides* sp.

**undet. Phacopidae**

See *Acidaspis tuberculatus* Conrad.

**undet. Trilobita**

HYPOTYPE YPM 6608

Whittington, H.B. 1957. J. Paleont. v.31, pl.1, f.11,16.

Late Ordovician, Frankfort Shale. 10 mm thick bed of black shale, about 30 in above stream bed, on N bank of Sixmile Creek in Cleveland's Glen, near Rome, Oneida Co., New York, USA. Collector: Beecher, C.E. and Nason, F.L., 7/1893.

HYPOTYPE YPM 17096

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, pl.2, f.14.

HYPOTYPE YPM 17098

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, pl.2, f.11.†

HYPOTYPE YPM 17099

Kindle, C.H. 1942. Am. J. Sci. ser.4,v.240, n.9, pl.2, f.13.†

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspe, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.

HYPOTYPE YPM 31960

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.216, pl.1, f.8.††

Early Cambrian, Kinzers Fm. Noah L. Getz Farm, 1 mi N of Rohrerstown, Lancaster Co., Pennsylvania, USA. Collector: Getz, N.L.

See also *Proetus parviusculus* Hall and *Triarthrus beckii* Green.

†The magnification for pl.2, f.11 is about 2x, not 4x as stated in the plate explanation.

††Cited as "type."

**undetermined genus and species A**

HYPOTYPE YPM 18077

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.84, pl.18, f.21,23,24.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

**undetermined genus and species B**

HYPOTYPE YPM 18184

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.122, pl.28, f.16,20,25.

HYPOTYPE YPM 18185

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.122, pl.28, f.26-28.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

**undetermined genus and species C**

HYPOTYPE YPM 18201

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.120, pl.29, f.20,21,24.

Early Ordovician, Garden City Fm, Zone G(1). 428 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946.

**undetermined genus and species D**

HYPOTYPE YPM 18283

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.126, pl.35, f.1,2.

Early Ordovician, Garden City Fm, Zone B. Float, 98-118 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

# **undetermined genus and species E**

HYPOTYPE YPM 18284

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.126, pl.35, f.3-5.

Early Ordovician, Garden City Fm, Zone F. 357-372 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946 to 1947.

## **undetermined Lichidae**

See *Phaethonides* sp.

## **unidentified protaspid hypostome**

HYPOTYPE YPM 18785

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.645, pl.63, f.21.

HYPOTYPE YPM 18786

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.645, pl.63, f.22.

Early Ordovician, Garden City Fm, Zone G(2). 609 ft above base of Garden City, measured section up from base of Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

## **unidentified pygidium**

HYPOTYPE YPM 18327

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, pl.26, f.15.

Early Ordovician, Garden City Fm, probably Zone G. 1065 ft above base of Garden City, measured section up from base of Garden City from a point about 2500 ft above US Rt. 191, W side of Clarkston Mountain, and 3 mi N04 W of Plymouth, and 4 mi S64E from Washakie, Portage Quad., S sec25T14NR3W, Cache Co., Utah, USA. Collector: Ross, R.J., Jr., 1947.

HYPOTYPE YPM 18784

Ross, R.J., Jr. 1953a. J. Paleont. v.27, n.5, p.642, pl.63, f.26.

Ordovician, Garden City Fm. 480 ft above base of Garden City, measured section up from base of

Garden City southward along ridge top on W side of Hillyard's Canyon, Bear River Range, and about 11 mi E of Preston, Preston Quad., W sec23T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1949.

## ***Vogdesia bearsi* (Raymond)**

HYPOTYPE YPM 25653A

Shaw, F.C. 1968. Mem. New York St. Mus. n.17, p.59, pl.24, f.13(right).

Middle Ordovician, Crown Point Limestone. Middle to upper part of formation, Sloop Bay, ledges near water in center of bay shore in dark gray, hard limestone with much pyrite, Shaw (1968) loc. V114, Valcour Island, Lake Champlain, Clinton Co., New York, USA.

See also *Isotelus bearsi* Raymond.

## ***Wanneria walcottana* (Wanner)**

HYPOTYPE YPM 9295

Walcott, C.D. 1916. Smith. Misc. Coll. v.64, n.3, p.219, pl.38, f.1,2.

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.228.

HYPOTYPE YPM 14345

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.228.

HYPOTYPE YPM 31961

Walcott, C.D. 1916. Smith. Misc. Coll. v.64, n.3, p.219.

Resser, C.E. and B.F. Howell. 1938. Bull. Geol. Soc. Am. v.49, p.228.

Early Cambrian, Kinzers Fm. Noah L. Getz Farm, 1 mi N of Rohrerstown, Lancaster Co., Pennsylvania, USA. Collector: Getz, N.L.

## ***Welleraspis newfoundlandensis* Lochman**

HOLOTYPE YPM 15823

Lochman, C. 1938. J. Paleont. v.12, n.5, p.469, pl.56, f.9-11.

Late Cambrian, Shallow Bay Fm. Loc. 2 of sketch map in notebook, Cow Head Peninsula, western Newfoundland, Canada. Collector: Dunbar, C.O., Jr., Leith, E.I. and Morris, P.A., 1933.

***Welleraspis? sp.***

HOLOTYPE YPM 18643

Shaw, A.B. 1952. J. Paleont. v.26, n.3, p.480.†

Late Cambrian, Rockledge Cgl. Basal sandy limestone below breccia lens, 3.5 mi N of St. Albans, Franklin Co., Vermont, USA. Collector: Schuchert, C.

†Cited as "Pygidium No. 1."

***Wilbernia sp.***

HOLOTYPE YPM 18432

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.653, pl.95, f.28.

Late Cambrian, Gatesburg Fm. Crystalline dark limestone, 105 ft above base of Ore Hill Mbr, N side of Potter Creek, N of Scott Fisher Farm; outcrop extending about 0.25 mi, just N of Maria, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

HOLOTYPE YPM 18587

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.653, pl.95, f.27.

Late Cambrian, Gatesburg Fm. Intraformational conglomerate with trilobite coquina, 20 ft below top of Ore Hill Mbr, Flucht-Eschelmann quarries, on and S of county road connecting Lafayetteville with PA Hwy 868, in ledges behind Flucht place S of county road on former township road, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Xenocheilos spineum Wilson***

HOLOTYPE YPM 18509

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.649, pl.95, f.15, 16.

Late Cambrian, Gatesburg Fm. Gray crystalline limestone, pinkish intraformational conglomerate, 49 ft above base of member, Drab, on slopes N of and in low road cut at S side of asphalt township road 0.25 mi W of Drab-Beaverton, Huntingdon Quad., Huntingdon Co., Pennsylvania, USA. Collector: Wilson, J.L.

HOLOTYPE YPM 18512

Wilson, J.L. 1951. J. Paleont. v.25, n.5, p.649, pl.95, f.17.

Late Cambrian, Gatesburg Fm. Pinkish intraformational conglomerate, 68 ft above base of

member, dolomite ledges in wheat field S of Potter Creek, S of old school house on Potter Creek, along property line bounding Miller's land, just above R. Ferry farmhouse, S of fault, Everett Quad., Bedford Co., Pennsylvania, USA. Collector: Wilson, J.L.

***Xenostegium franklinense Ross***

HOLOTYPE YPM 18159

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.25, f.2.

PARATYPE YPM 18158

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.24, f.9.

PARATYPE YPM 18160

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.25, f.3.

PARATYPE YPM 18162

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.24, f.10.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

PARATYPE YPM 18233

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.24, f.8.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

PARATYPE YPM 18319

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.24, f.13.

PARATYPE YPM 18320, 18321



Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.25, f.9.

Early Ordovician, Garden City Fm, Zone B. 70 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1947.

PARATYPE YPM 18335

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.24, f.14.

PARATYPE YPM 18336

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.24, f.12.

PARATYPE YPM 18337

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.24, f.11.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

PARATYPE YPM 18343

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.25, f.1.

Early Ordovician, Garden City Fm, Zone B. 163 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

PARATYPE YPM 18345

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.25, f.4.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

PARATYPE YPM 18346

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.102, pl.25, f.5.

Early Ordovician, Garden City Fm, Zone B. 125-145 ft above base of Garden City, eastward along 1 mi long measured section up from a point at St. Charles-Garden City contact about S46E from hill 8961 and slightly N of W of Franklin Basin Ranger Station, and ending at road near that ranger station, W side of Franklin Basin, Bear River Range, and about 12 mi E of Preston, Preston Quad., sec2T16SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 7/20/1946.

***"Xenostegium" taurus (Walcott)***

HYPOTYPE YPM 18168

Ross, R.J., Jr. 1951a. Bull. Peabody Mus. Nat. Hist. n.6, p.103, pl.27, f.6,7,11.

Early Ordovician, Garden City Fm, Zone G(1). 428 ft above base of Garden City, northeast (N45E) along 0.5 mi long measured section starting along road at bottom of Hillyard's Canyon at a point 0.8 mi N of S end of canyon at an elevation of 7200 ft, and ending near top of ridge on E side of canyon, Bear River Range, and about 12 mi E of Preston, Preston Quad., E NE sec23T15SR41E, W NW sec24T15SR41E, Franklin Co., Idaho, USA. Collector: Ross, R.J., Jr., 1946.

***Xystocrania perforator (Billings)***

See *Nieszkowskia excelsus* Raymond and *Nieszkowskia perforator* (Billings).

***Zacanthopsis resseri* Kindle**

HOLOTYPE YPM 17095

Kindle, C.H. 1942. Am. J. Sci. ser.4, v.240, n.9, p.641, pl.2, f.4.

Cambrian, Corner-of-the-Beach Fm. W of Corner-of-the-Beach, Gaspe, Quebec, Canada. Collector: Schuchert, C. and Cloud, P.E.

***Zacompsus clarki* Raymond**

HOLOTYPE YPM 4759

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.401, pl.12, f.13.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.148, pl.12, f.13.

Ludvigsen, Rolf and S.R. Westrop. 1989. Paleont. Can. n.6, p.43, pl.31, f.11-13.

HYPOTYPE YPM 4760

Raymond, P.E. 1924a. Proc. Boston Soc. Nat. Hist. v.37, n.4, p.401.

Raymond, P.E. 1924b. Rpt. Vt. St. Geol. p.148.

Middle Ordovician. Zone 2, Highgate Falls, Franklin Co., Vermont, USA. Collector: Schuchert, C. and Dunbar, C.O., 1923.

**Acknowledgements**

The authors thank Jon Adrain, Fred Collier, Greg Edgecombe and Steve Westrop for reviewing this manuscript. Jon Adrain was particularly helpful with the Silurian stratigraphic terms, Greg Edgecombe steered the authors to many overlooked references and Steve Westrop was helpful with the Cambrian rock units. Pierre Lesperance clarified the geologic age of many of Schuchert's and Cooper's Perce, Quebec localities. Albert Kollar was helpful in locating many of Percy Raymond's type specimens at the Carnegie Museum. Larry Gall and Rosemary Volpe made significant improvements to the layout and style of this catalog. Many thanks to Brent Horstman and Laura Skorina for editing and formatting this catalog.

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